

*THE*

**O**

# RESOURCE

NEWS, REVIEWS, INFORMATION TO USE

Volume 4 No. 5  
May/June 2017

**SCALE**

**It's Auction Time!  
Business Car Matilda  
Recap of The March Meet  
March Meet Model Contest  
What are Low-D Wheelsets?  
Scene Around the Layout  
T&P Baggage Dormitory Car Pt 4  
Workbench, Oddities  
Shows, Meets and so much more...**

# *The Yankee Clipper*

**O Scale East - 49th O Scale National Convention**



**Holiday Inn  
Enfield CT/  
Springfield MA**

**Thu.-Sun. June 22-25, 2017**

**Dealers, Clinics, Model Contests  
Pioneer Valley Live Steamers**

**Essex Steam Train Tour, Layout Tours**

**Lodging, Dining and Convention All Under One Roof**

**Hosted by The Southern New England Model Railroad Club**

**INFO: [www.snemrr.org](http://www.snemrr.org) or call (978) 928-5724**

## **O Scale West**

**Including S West 12**

**27th Annual Meet: May 25 - 28, 2017**

Hyatt Regency Santa Clara  
5101 Great America Parkway  
Santa Clara, CA 95054 - 800-421-1442

Thursday May 25: movies, registration, layout visits

Friday May 26 - Sat. May 27: sales/exhibits, contests, layout visits, clinics

Sunday May 28: remote layout visits

Registration: \$35 individual or family, \$40 after March 31

Tables: \$45 each, \$50 after March 31

See [www.oscalewest.com](http://www.oscalewest.com) for meet updates, to register at the hotel, and to download the meet registration form.

For more information: [info@oscalewest.com](mailto:info@oscalewest.com) and 650-218-5752

---

Published Bi Monthly

---

The Model Railroad Resource LLC  
Dwight, Illinois

---

Owner / Publisher  
[Amy Dawdy](#)

---

Managing Editor / Advertising Executive  
[Daniel Dawdy](#)

---

**May/June 2017**  
**Volume 4 No. 5**

---

Welcome to the online *O Scale Resource* magazine. The magazine is presented in an easy to use format. The blue bar above the magazine has commands for previewing all the pages, advancing the pages forward or back, searching to go to a specific page, enlarging pages, printing pages, enlarging the view to full screen, and downloading a copy to your computer.

#### Front Cover Photo

Shot of the Indiana On30 Narrow gauge group's portable layout on display at the March Meet.

#### Rear Cover Photo

The locomotive model is an Atlas 2-Rail O-Scale 8-40BW with DCC and sound. Kadee couplers have been added. The model dates from 2009, and is being operated on Brian Huang's 2-Rail Inglenook portable, switching layout, done in 8 ft. This layout was on display at the 2017 March Meet.

# Bill Of Lading

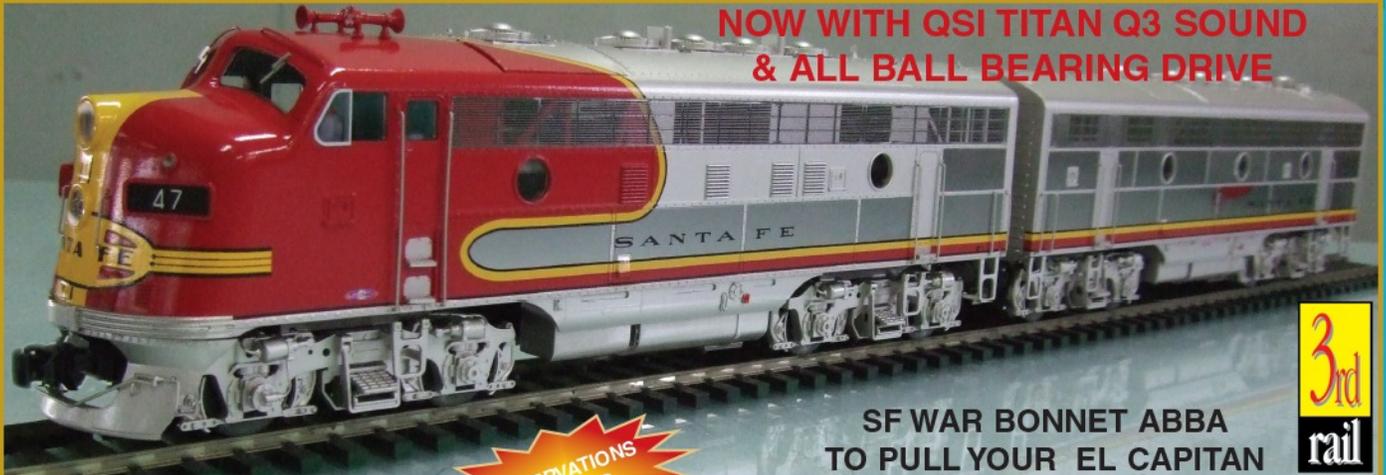
## Page

- 3** [Bill Of Lading](#)
- 5** [From the Publisher's Desk](#)
- 6** [News You Can Use](#)  
*New Items of Interest*
- 13** [Chicago O Scale Meet 2017](#)  
*Coverage of this year's show*
- 27** [Chicago O Scale Meet Contest Results](#)
- 39** [What Are Low-D Wheelsets?](#)  
*25 Years of Experiments by Tad Daito*
- 46** [It's Auction Time!](#)  
*We pay a visit to Stout Auctions to see how train auctions work during the James Seacrest auction.*
- 54** [Baggage Dormitory Car Part 4](#)  
*Bill Basden finishes up his four part series on building the Texas & Pacific No. 300 Baggage Dormitory Car.*
- 73** [Business Car Matilda](#)  
*George Paxon builds a business car on the Mountain Electric Railway.*
- 87** [Oddity](#)  
*One that is odd*
- 88** [What's on your workbench today?](#)
- 90** [Scene Around the Layout](#)
- 91** [Show Schedule](#)
- 93** [Classified Ads / Advertisers Index](#)

The Model Railroad Resource, LLC publishes [THE O SCALE RESOURCE](#) and [THE S SCALE RESOURCE](#). Be sure to look at both of our magazines. There are many articles in our magazines that are not scale specific and will be of interest to you. Click the magazine title in this announcement to see the magazine.

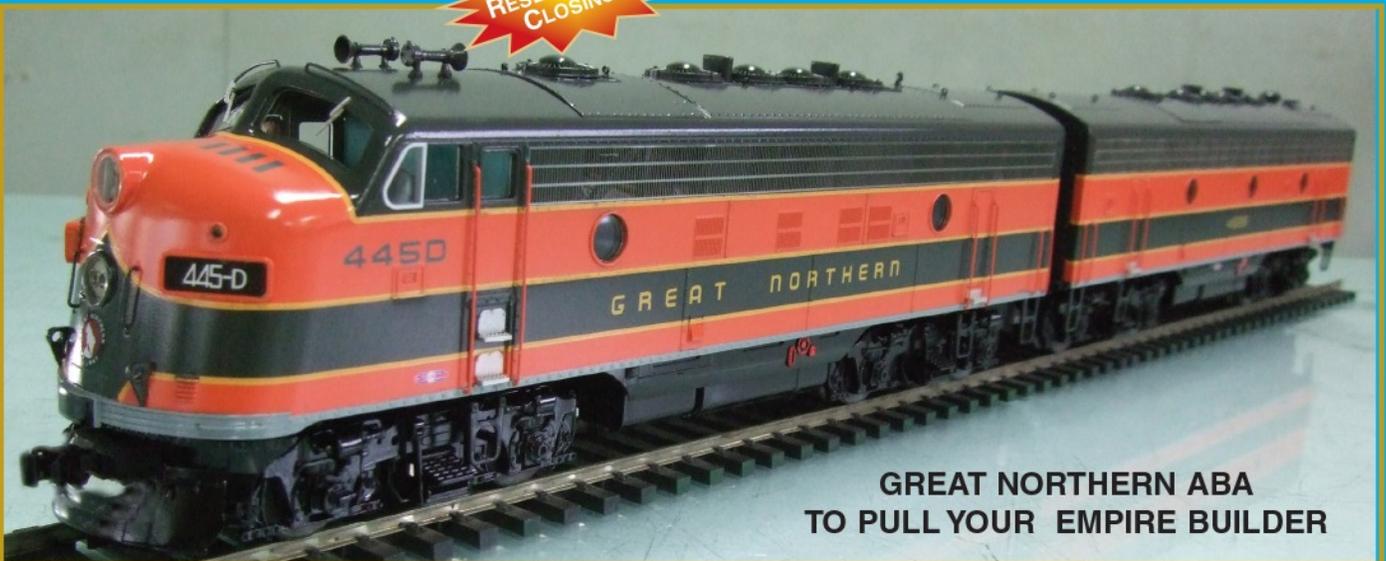
# ENCORE - EMD F7 DIESELS

NOW WITH QSI TITAN Q3 SOUND  
& ALL BALL BEARING DRIVE



SF WAR BONNET ABBA  
TO PULL YOUR EL CAPITAN

RESERVATIONS  
CLOSING



GREAT NORTHERN ABA  
TO PULL YOUR EMPIRE BUILDER



SP BLACK WIDOW



RIO GRANDE 4S



EMD DEMO



SF FREIGHT

Highest Quality, Super Detailed and Scale Accurate. ABS Body, Die Cast Trucks, Fixed Pilot, All Drivers Powered

**3RD RAIL DIVISION OF SUNSET MODELS INC.**

16 Beta Court · San Ramon, CA · 94583 · 925-820-7701 · fax 925-820-7709 · [www.3rdrail.com](http://www.3rdrail.com)

# From the Publisher's Desk



Happy Spring everyone! This time of year brings with it the dreaded “spring cleaning”. Here in the Midwest, that means lawn and garden work. The older I get, the more I hate doing this. The riding lawn mower is ok, but cleaning gardens is the pits...maybe it's time to hire someone. Shhh, don't tell Dan I'm admitting to being old, he'll never let me forget that I admitted it! Spring cleaning is also a great time to reassess projects than need to be completed. That being said, do you have something that needs to be completed –maybe a model for an upcoming contest? The [49th Annual O Scale National Convention](#) is being held June 23-24, 2017 in Enfield, Connecticut, and this would be a great place to enter your completed model. Dan will be there, so stop by and say hello. And, don't forget about the [2017 O Scale West / S West 12](#) in Santa Clara, California on May, 25-27, 2017.

Speaking of completing projects, for those of you that follow our Facebook page, you may have noticed that the front cover for this issue has changed. We still have everything listed including coverage of the March Meet that was held in Lombard, Illinois. However, Dan “jumped the gun”, as they say, and posted a preliminary cover showcasing an article *Scratchbuilding With Styrene*. This article will not appear in this issue, but will definitely be in the July/August issue. We do, however, have a great article from Australian author, George Paxon, on building the *Business Car Matilda*, and Part 4 of Bill Basden's series on building a T & P Baggage Dormitory Car. In addition, Dan goes behind the scenes at Stout Auctions to bring you the story of what takes place leading up to and selling a collection via an auction house.

We continue to receive articles from authors outside of the U.S., and as noted above, this issue is no exception, once again featuring an article from Japanese author, Tad Daito. Along with our international readership and articles comes a different writing style. Please be aware that U.S. English is not always the first language of the author. That being said, we edit articles for flow, making only minor punctuation, grammar or content changes. By doing so, we allow the flavor (or do you say flavour?) of the author's dialect to shine through in the writing.

This issue features a great *Scene Around the Layout* item, but we do not have a layout featured. Please contact us so we can feature your layout, in whatever stage of completion it happens to be in. Beautiful scenery and finished layouts are great; but, as you know, this is not always the case in real world modelling. Readers want to see what's being done by others and get ideas or inspiration – it doesn't have to be complete.

Dan and I love to travel, but it's not always possible. With today's technology, we do not have to physically travel to your layout in order to write an article. You can submit pictures; and, if you want, you can write the article, but you don't have to. I know writing an article can seem rather daunting, so this is where technology can help. We'll ask you questions via email (or telephone if you prefer), and put your answers and photos into an article that you can be proud of! Just contact me or Dan so we can share your layout with others in the hobby. Email [amy@modelrailroadresource.com](mailto:amy@modelrailroadresource.com) or [daniel@modelrailroadresource.com](mailto:daniel@modelrailroadresource.com) or call us at 815-584-1577. We look forward to hearing from you!

Happy Reading & Happy Modeling,

*Amy Dawdy*

# NEWS YOU CAN USE



New from [Woodland Scenics Quality Brands](http://WoodlandScenics.com): Coming soon to the line of Built-&-Ready Landmark Structures is the O scale Old Homestead.

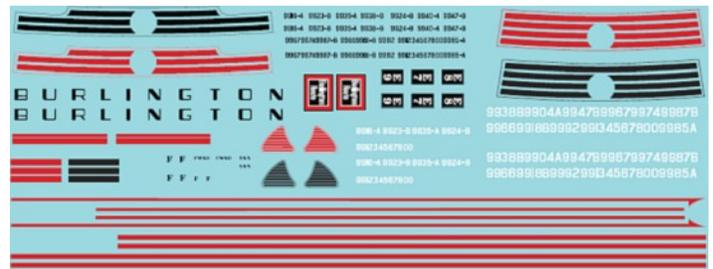


The Old Homestead's rustic appearance is the perfect representation of a cozy home for country living. Hand-painted and beautifully weathered, this building is layout-ready and loaded with details. Features include a rusty propane tank; a couple of old barrels; the old hound dog, Bowser, asleep on the front porch; six arrangeable accessories including an outhouse, mailbox and more. This building also contains two interior lights to show off the printed interior and one porch light. The installed LED lighting was made for use with the Just Plug® Lighting System. Check out all their offerings at [Woodlandscenics.com](http://Woodlandscenics.com)



OBS-CALS introduces a new "O" scale decal set for Burlington's "E" units. There will be a set for the F3's (9960A – 9965A, 9960C – 9965C) coming soon provided there is some interest. The set features all new, vector format, artwork and included both red and black nose stripes. There are both notched and un-

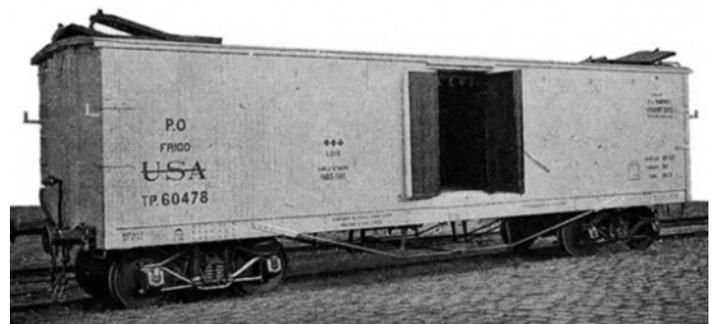
notched stripe sets in red and black. In addition, there is some extra striping to use on the ends of the large number boards as used on the E8's and E9's. Also included are the "E" unit ID emblems (E7, E8 and E9) with the stripes and numerals clear so the body color shows through, as in the prototype.



Cost for the set will be \$20.00. I will be accepting orders until March 20, at which time I will order the sets. I can order more at anytime, but I will need orders for 4 sets minimum before I can order additional sets. Contact John Hagen at via email for information. [obs.cals@ameritech.net](mailto:obs.cals@ameritech.net)



Joël Rassehaert sent us information on his small business of french paint schemes on German models at O-scale (1/45 scale proportions). For 2018, he has an ambitious project which consists in reproducing WWI US railway cars used in France. As a first model, he will offer the reefer car, used to transport frozen meat for troops' feeding, which represents the technological advance of the USA in these times. 36'



wood sided reefer around 1921 with both US, TP and Paris-Orléans letterings shown above. See Joël's ad in this issue and click on it to visit his [Website for all the details](#).

Decals for The Interstate Railroad's 2-bay hoppers, in white (set #141), are available in O-scale from Great Decals!, 3306 Parkside Terrace, Fairfax, VA 22031, for \$16.99 each, postpaid. See their web site, [www.greatdecals.com](http://www.greatdecals.com)

Each set provides 12 "canned" road numbers, and the modeler can easily make any road number valid for the cars. Each set does one car.



These decals include the serifed road name, road numbers for both sides and ends, and three sets of capacity and side data that the modeler may mix and match. Dealer's inquiries welcome. Virginia residents please include sales tax.



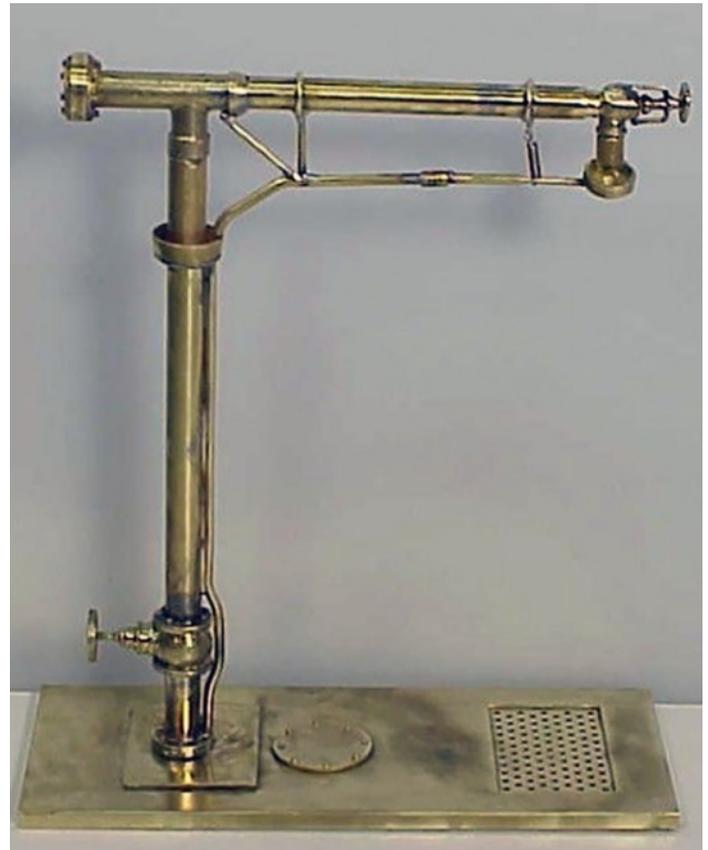
Scott Mann of 3<sup>rd</sup> Rail/Sunset Models says: Announcing something new and different: Many of you have Amtrak Diesels from other manufacturers, but no one has ever made proper, scale length Amfleet cars to go with them. GGD will step up to the task. We will produce 4 different cars, sold in 5 car



*Prototype car show*

sets, with extra coaches available in ABS Plastic with full interior and underbody detail and LED lighting with figures in each car. Reserve your choices and know they will be done with the attention to accuracy and detail that you have come to expect from GGD. See our web site for more information [here](#).

Bill Davis from American Scale Models says: Coming soon from American Scale Models is the O scale Southern Pacific "Rose" oil column, seen in many locations on the SP. All brass, factory painted black; swiveling spout with prototypical drip pan.



Due late summer of this year. Price \$149. (1st pilot model shown) More pictures available at [americanscalemodels.com](http://americanscalemodels.com)



The 2017 SoundTraxx Digital Sound Decoder Catalog is now available online or by request.

The 20-page, full-color catalog showcases SoundTraxx Digital Sound Decoder lines: Tsunami2, Econami, and Tsunami SoundCar, as well as popular installation accessories. It also includes a brief overview of SoundTraxx company history and outlines the steps of choosing a digital sound decoder. In addition to product photos, the catalog incorporates detailed diagrams of the decoders' technical specifications and installation photos.



The catalog is available online at [www.soundtraxx.com](http://www.soundtraxx.com) and hard copies can be requested free-of-charge from [sales@soundtraxx.com](mailto:sales@soundtraxx.com) or by phone at (970)259-0690.

Founded in 1990, SoundTraxx produces state-of-the-art sound systems for the model railroad. SoundTraxx Digital Sound

Decoders feature a vast library of prototypically correct sounds and lighting effects. SoundTraxx also produces a wide range of installation accessories, including speaker kits and wiring aids, to bring model railroads to life. To view products and for more information, visit [www.soundtraxx.com](http://www.soundtraxx.com).



Ted Schnepf from [Rails Unlimited](http://Rails Unlimited) announces a new stock car that has never been offered in brass or any other modeled medium. The model is the distinctive CB&Q 36' stock car in urethane, and this model is a departure in that the "Z" braces are in two parts, making a true "Z" brace. CB&Q stock car classes SM-16/SM-18 and SM18A.



These three classes of CB&Q stock cars total 3000 cars with many construction variations. All of the cars have a distinctive feature in the high side sill, with vertical and diagonal posts connecting to the bolsters and cross bearers, creating a "sawtooth"

appearance. The first cars were built in 1922 and had a long life into the BN era in the 1970's. And other models including Milw stock and ribside cars, LV wrongway door models, 19d2 steel boxcars for NKP, C&O, SAL; 40' Wabash single sheathed auto cars and gons from PRR and ACL. For more information go to [RailsUnlimited.ribbonrail.com](http://RailsUnlimited.ribbonrail.com) or Email Ted.



Tom Dempsey from Clover House has added [Peco IL-13 track spikes](#) and [Kadee Acetal screws](#) to their inventory and has restocked [.020 Lexan sheet](#). Check out all

their great products at [cloverhouse.com](http://cloverhouse.com)



Rick from [Rusty Rail](#) has some new O scale releases. Here are the new cable reels and junk piles. You get both junk piles shown to the right. Full of detail for your logging camp or any industry that would use cable. Also there are the separate cable



reels you can buy to place on your layout or make a truck bed load etc. You get 4 cable reels in the four different sizes. Castings are sold unpainted. Check all the products at [Rusty Rail's Website](#).



Just announced from [Woodland Scenics Quality Brands](#): New Built-&-Ready® Building: Grillin' & Chillin' Trailer coming soon to the line of Built-&-Ready Landmark Structures is Grillin' & Chillin' Trailer, available in N, HO, and O scales. Just take a seat in one of the chairs on the deck and relax in the shade while the food cooks.



This trailer is perfect for grilling and chilling on hot summer days. The Grillin' & Chillin' Trailer features a large front deck with an awning, trash can, a TV antenna for entertainment on rainy days, and it even has a window A/C unit for beating the summer heat. Anticipated release: July 2017. These Built-&-Ready® Landmark Structures® come with a printed interior and two LED lights. The installed LED lighting was made for use with the Just Plug® Lighting System. Check out all their offerings at [Woodlandscenics.com](#)



Late update from [John Hagen of OBS-CALS](#): I received an email from Charlie Vic regarding the numbers on the F3's, including the B units. The following is per Mr. Vik. There were small, black numbers under the large BURLINGTON on each side plus low on the blind ends on each side of the door. So that would mean 4 number sets for the A units and six for the B units as they have two blind ends. I've redone the sets to include these numbers. Yes, you will have to do some careful cutting as space is limited, but enlarging the space would mean less sets per sheet of decal paper and a boost in the cost of \$4.00 or more per set. Use of decal scissors is recommended.

There are several types of small scissors suitable for decal work sold by Micromark and Amazon. Search for "scissors" in MM and for "decal scissors" on Amazon. They can be pricey although Squadron has rather reasonable ones on Amazon. Sample below.



Please [contact John](#) for more information.



[Model Tech Studios LLC](#) continues to bring out more O Scale people. Ken has heavy boxes in his arms and is stacking them (pile at his feet)...Great Freight Dock Figure or in the back of a truck; also great for a delivery man delivering boxes to a industry or business.



Ugh....this load is HEAVY. He's pushing a fully loaded freight dolly. This Warehouse or Freight Dock Laborer is busy with today's delivery back breaking work. [Check their Website](#) for all their O Scale products!



BlueRail Trains has added a tutorial article on their website showing how to make your own AC-DC converter, so you can add a BlueRail board to your loco running on AC powered track. The simple schematic (designed by Bob Walker) requires about \$10 in parts. The BlueRail board will let you control your loco from over 100 ft with the free BlueRail iOS or Android app.



The article/schematic is available at [THIS LINK](#). BlueRail boards are available at the [BlueRail website](#).

Jon Cagle from [Southern Car and Foundry](#) has a new freight car kit.



Featuring a one piece body/floor combination and one piece roof castings, this kit represents the rebuild versions of Sands Springs Railway "Alternate" ARA Design Single Sheath Boxcar. Kit also includes brass etched parts such as stirrup steps, running board supports, and brake levers, etc. Laser cut templates for marking of holes for proper alignment. Laser cut roof walks, and your typical assortment of injection molded details from the good people of San Juan and Chooch, along with styrene strip and wire. Also included are a set of instructions that contain over 70 images of the kit build. [Check out this beautiful kit here](#).



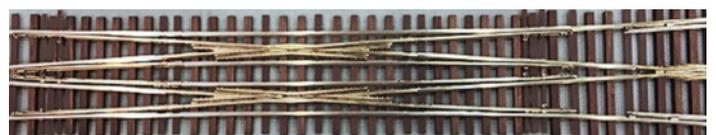
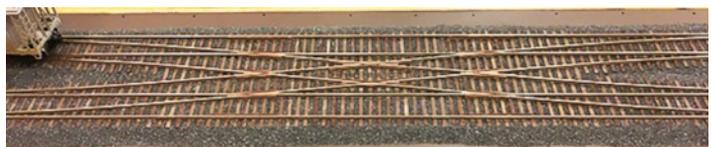
Kevin Macomber from [The Narrow Gauge Modeling Company](#) says: Check out our tarp loads. These are the very best in the market and they save a ton of time as you don't have to screw around with tissue paper and glue.



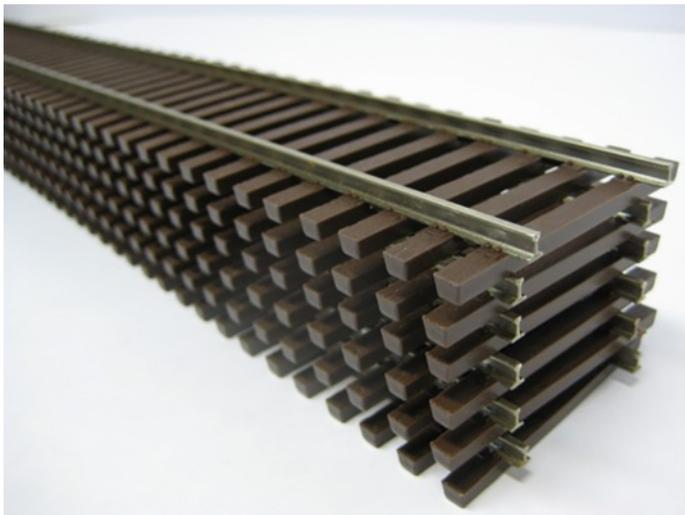
[Check their Website](#) for all your On18, On2, On3 and On30 modeling needs. Not into narrow gauge, not a problem, they have figures, loads, details and so much more.



Bill McConnell from [Oscale Turnouts, Inc.](#) is introducing their #8 double-slip and #8 double crossover turnouts to the O-scale 2-Rail model railroad community. In development for the past twenty-four (24) months, the code 148, nickel silver turnouts feature in-house designed and produced all new prototypically sized cast rail-bound frogs, points and guard rails. Designed to the A.R.E.A and 1921 Maintenance of Way Standards. Oscale Turnouts, Inc. cast rail-bound frogs, points and guard rails complete with nut and bolt detail for a prototypical appearance. [Check their Website](#) for more information.



Jay Criswell from [Right O' Way](#) has some new items. They now have P:48 Flex Track back in stock. It's all code 125, but is available in weathered or non-weathered and is 32 1/2" in length. We're also stocking ME O Scale flex track. [Details here.](#)



Also on a similar subject, we are working with ME to make P:48 flex track with steel rail. The initial test run is being done today. We are making 20 pieces for testing the market. All should be resolved by the time of publication. [Check all their products here.](#)


# P & D

## Hobby Shop



**EMD Blomberg Trucks**  
 Fully sprung in brass.  
 Sold separately or with repower kits.  
 See our web site for details.

31280 Groesbeck Rd, Fraser, MI  
 Voice: 586-296-6116 Fax: 586-296-5642  
 Open Mon-Fri 10-8 Sat 10-6 Sun 12-5

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





## O-SCALE U.S. ARMY REEFERS

## A.E.F. CARS IN FRANCE 1918


[www.facebook.com/Chrezo-511705379004440](http://www.facebook.com/Chrezo-511705379004440)


CHREZO E-Mail: [112chrezo@orange.fr](mailto:112chrezo@orange.fr)



I WANT YOU

### Altoona Model Works

AltoonaModelWorks is taking preorders for the Omaha Station



This will be Cast urethane kit with mix of laser cut wood & plastic parts. Model features a removable base and will have optional lighting and super detail kit.

Visit our website: [altoonamodelworks.net](http://altoonamodelworks.net)

AltoonaModelWorks / 2172 Cross Cove Rd  
Martinsburg, PA 16662

### The O Scale Hauler



THE ULTIMATE  
TRANSPORTATION AND STORAGE  
SOLUTION FOR YOUR O SCALE TRAINS

[www.oscalehauler.com](http://www.oscalehauler.com)  
[oscalehauler@verizon.net](mailto:oscalehauler@verizon.net)

### WWW.SBS4DCC.COM



**ESU**

FULL THROTTLE  
DIESEL



**SOUNDTRAXX**

Economic  
Tsunami 2



**MRT**

AccuTrack II  
SPEEDOMETER



**WOWSound**



**DCC concepts**



**TCS**



**DIGITRAX**



**TAM VALLEY DEPOT**



**NCE**

The Power of DCC



**SPROG DCC**

The DCC Programmer and Control Panel



**ZIMO**

TEAM DIGITAL  
Improving the world of DCC

IN STOCK - OPEN 24-7  
 Featuring "Ultra Bass" Speakers

**the 0 Scale Kings**



An O scale organization promoting 1:48 2-rail trains.

Join us at:  
**oscalekings.org**

**Mather Car Project: Reserve Now!**



**Four Stock Car Styles - Three Box Car Styles**

High Quality Trucks Available Two Rail "O" and Proto48  
www.richyodermodels.com PH 610-678-2834 (6:00 to 9:00 PM EST)

**Model Trolley Specialist For Over 40 years**

St. Petersburg Tram Collection  
Car Works \* MTS \* Q Car \* Bronze Key  
Ken Kidder \* LaBelle \* Clouser \* Ashland  
Parts \* Trolley Poles \* Power Trucks  
Kits \* Overhead Wire & Fittings

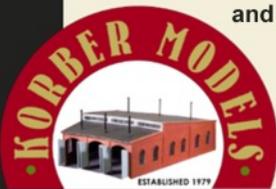
**NEW TORONTO CLRV KITS ARE NOW SHIPPING!**  
KIT INCLUDES INTERIOR, UNDERBODY AND NEW DECAL SHEET  
NEW PCC KITS, ILLINOIS TERMINAL INTERURBANS & MORE COMING!

**The Berkshire Car Shop**  
505 Morning Dove Road, Audubon, PA 19403-1807  
610.631.9751 Evenings and Weekends  
Email berkshirecarshop@comcast.net

**Scale Model Railroad Structures**

**Over 300 O Scale Kits Available**

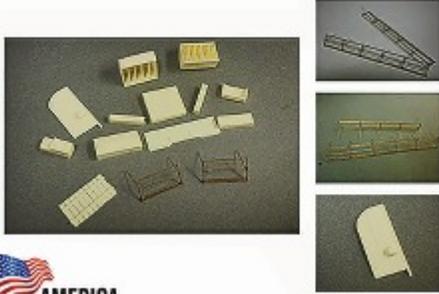
Visit our Website to review pictures and other models in HO and O scale today!




165 E Main Street  
Atlanta, IN 60431  
765.292.2044  
**korbermodels.com**

**Delta Models**

Cast Resin Parts for O Scale Passenger Cars



**MADE IN AMERICA**

Visit Us at [www.deltamodelsusa.com](http://www.deltamodelsusa.com)

**O Scale Decals**



for steam-diesel era freight cars from 1930 to 1960, representing over 200 railroads with "as-delivered and repaint schemes"

Available at [protocraft.com](http://protocraft.com)

**PROTOCRAFT™ DECAL LINE**

**Find us on Facebook**





# CHICAGO O SCALE MEET 2017

By Daniel Dawdy

Once again, this past March, Lombard, Illinois was the place to be for anything O Scale. The weather was not too bad this time around, and turnout was fantastic. In fact, because we were working the contest in the morning, by the time I was able to take pictures there were really too many people in the isles. As a result, many of the following images were shot early Sunday so I would not be bumping into people, and I was able to talk to the vendors without disrupting sales.

*The O Scale Resource* sponsored the model contest again this year, and those results can be found later in this issue.



*Mr. Mike Hill and family continue to bring us a high quality show year after year.*



*Above: I am not a trolley guy, but I still looked long and hard at this one. This was a beautiful model for sale.*

*Below: Jack McGarry of Allegheny Scale Models, LLC and Mike Hill, Jr. talk some business.*





*Above: Altoona Model Works was showing their products. The roundhouse above was a custom build for a three rail client.*

*Below: Yes, there were some good prices at the show.*





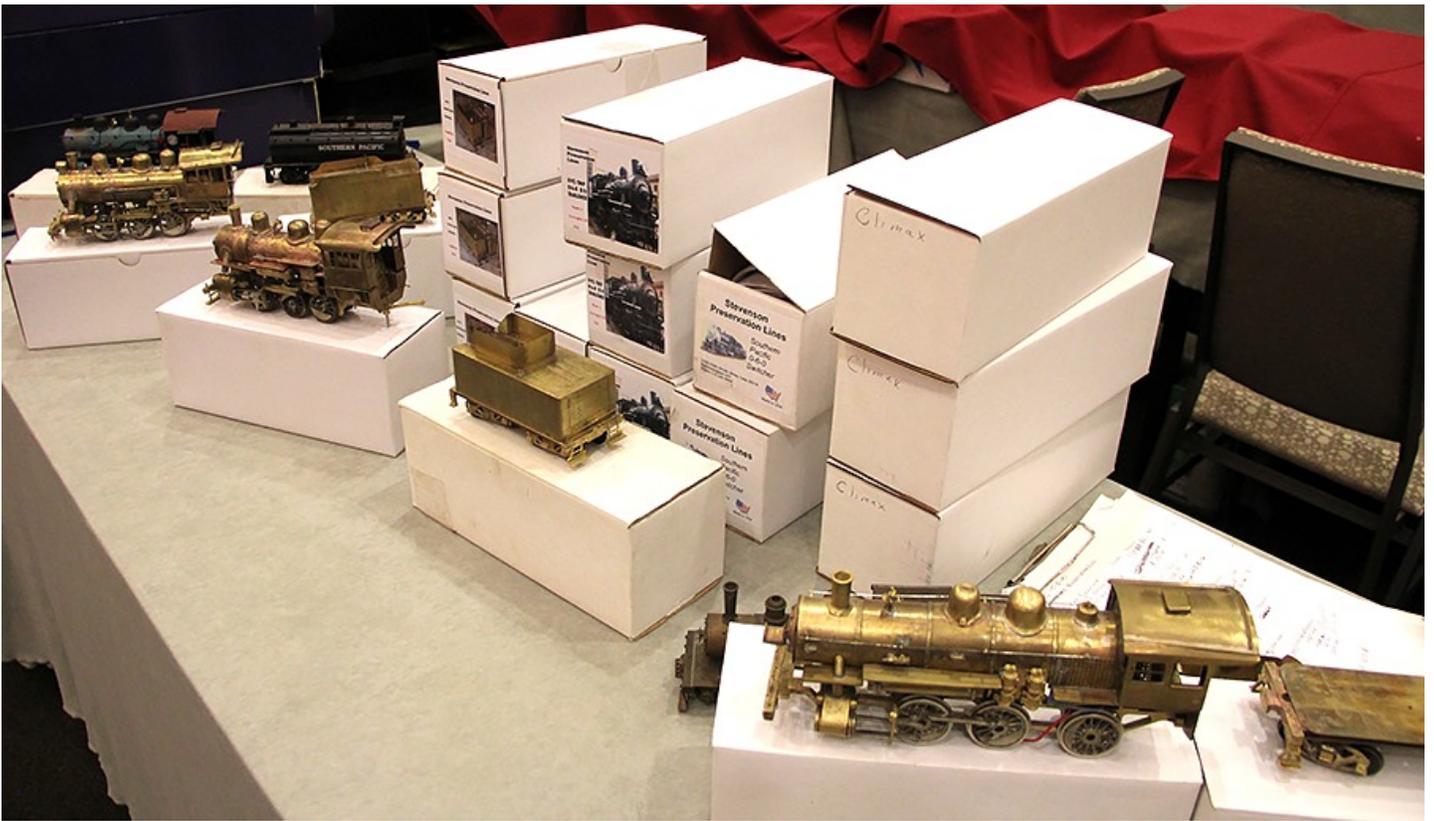
*Pat Mucci from P&D hobbies had his full display.*



Pat was also this year's inductee into the O Scale Hall of Fame sponsored by the O Scale Kings.



*Ted Schnepf from Rails Unlimited talking with Karl Keller.*



*Above: Stevenson Preservation Lines was there showing all their kits and cast parts.*

*Below: More goodies to select from.*





*3<sup>rd</sup> Rail/Sunset's display. Both Bob Heil and Scott Mann were on hand for the opening of the show.*



*Rich Yoder from RY Models was selling trucks and taking reservations for their new Mather Box, Stock, and Refrigerator car project.*



*A new face this year was Steve Nelson, or as many of you know him, Mr. Muffin of Mr. Muffin's Trains. Steve recently bought the Korber Models line of buildings.*



*Classic Freight Car Models display featuring kit built and custom built cars.*



*Jim Kehrein with Monarch Models was a vendor with their old standard couplers and other items.*



*The “great one” Ron Sebastian from Des Plaines Hobbies enjoying an early morning coffee.*



*Above: Lots of interesting items from Richard Rusnak.*

*Below: Marty from Scale City designs working a customer.*

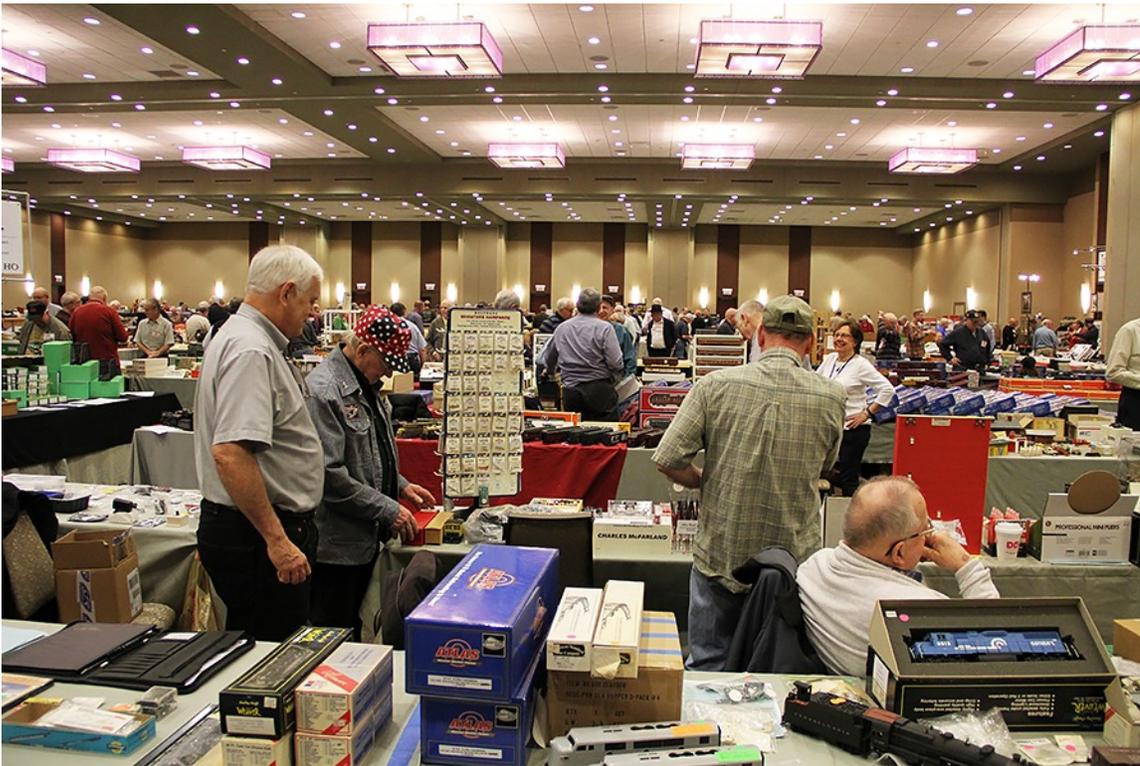




*Above: Jay and Kathy Criswell, new owners of Right-O'-Way, were doing a great business with all their track parts and more.*

*Below: James Harper of Red Cliffs Miniatures was showing his line of P48 parts and switch stands.*

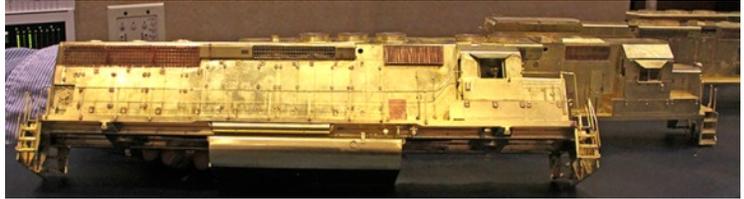




*Above: Just more stuff!*

*Below: Another new vendor/manufacturer this year was Chris Wynn and Jerry Smigla from Big Windy LED. Selling LED's, parts, adjustable voltage boards, LED reels and so much more. I really liked their gooseneck lamps which, unfortunately for me, were sold out before I got my money out.*





*Erik from Midwestern Model Works and his builder, Mr. Song, from Korea were showing the pilot models of his new diesel locomotives.*

*Marty Milner and son, Marty, Jr. from Scale City Designs welcome back Martha Keil and her son, Jim. As most of you may know, Martha sold Keil Line to the Milners who were old friends of her and her late husband, John Keil.*





*Joe Fischer above. Picture courtesy of Rosemarie Quintero*



*Most of us older O Scalers know of beautiful passenger cars built by Joe Fischer. His daughter, Rosemarie Quintero, came up from Florida to see Glenn and myself again, and also visit with Dan Pantera who knew her father. She also visited with Mike Hill and brought some pictures and history of her father.*

*Bob Lavezzi was very pleased to meet Rosemarie and to share stories of the New York Society of Model Engineers.*



*Above: Damin Keenan was showing his switching layout. Damin continues to add details and scenery to his module.*

*Below: Brian Huang also had a small portion of his portable layout. This shows what you can accomplish in a small area with his great scenery.*



**OLD TYME WOOD CRAFTSMAN KITS**

**BUNKHOUSES**



**KIT #4011**  
\$48.98 U.S.A. shipping \$8.99

Ideal starter kit. Use with log scenes or for trackside buildings. Includes cast windows, door, full instructions and templates. Two structures. (Logs not included). Scale 10' x 20'. (each kit builds two structures).

scale 8" plastic Hooks



Part #8683 12/pkg  
\$7.98 U.S.A. shipping \$3.50

Part #8603 12/pkg  
\$11.98 U.S.A. shipping \$5.85



5/8" x 7/8" Wood barrels

Calif. Residents Add 9% Sales Tax  
P.O. Box 700  
Artesia, CA 90702  
www.jv-models.com



**DEALER INQUIRIES INVITED**

**ALLEGHENY SCALE MODELS**  
O SCALE LOCOMOTIVES & ROLLING STOCK

Sales, Collections, Consignments, Appraisals  
Brass, Custom Built Models, RTR, Kits, Decals

470 Schooley's Mountain Road, Suite 8-117  
Hackettstown, New Jersey 07840

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

PH: 908-684-2070 FAX: 908-684-8911  
oscale@alleghenyscale.com

**DID YOU MISS AN ISSUE OF THE O SCALE RESOURCE? FORGOT TO LOOK? WELL, SIGN UP HERE AND NEVER MISS ANOTHER EXCITING ISSUE. WE'LL SEND YOU AN EMAIL WHEN THE LATEST ISSUE IS LOADED TO OUR SITE. DON'T WORRY, WE WON'T SELL OR POST YOUR EMAIL ADDRESS TO ANYONE!**

**CLICK HERE TO SIGN UP TODAY!**

**DES PLAINES HOBBIES**

**Kits or RTR  
Brass  
Books  
Supplies  
Structures  
Detail Parts**

3-1/2 Miles north of O'Hare airport on Lee St.  
1524 Lee St., Des Plaines, IL. 60018  
Ph. 847-297-2118 Open Week Ends  
[www.desplainshobbies.com](http://www.desplainshobbies.com)

*Check our on line store. We ship daily.  
International sales welcome. Thousands of items listed.  
Call our friendly staff*



YOUR SOURCE FOR OVER 80 RAILROAD LETTERING, RAILROAD ROMANS, ALPHABETS, SILHOUETTES, DINGBATS, TRAINS, PLANES AND AUTOMOBILES AND EVEN SOME SURPRISES. ALL FONT SETS ARE AVAILABLE IN WINDOWS (TT AND ATM) OR MAC VERSIONS.  
**RAILFONTS.COM**

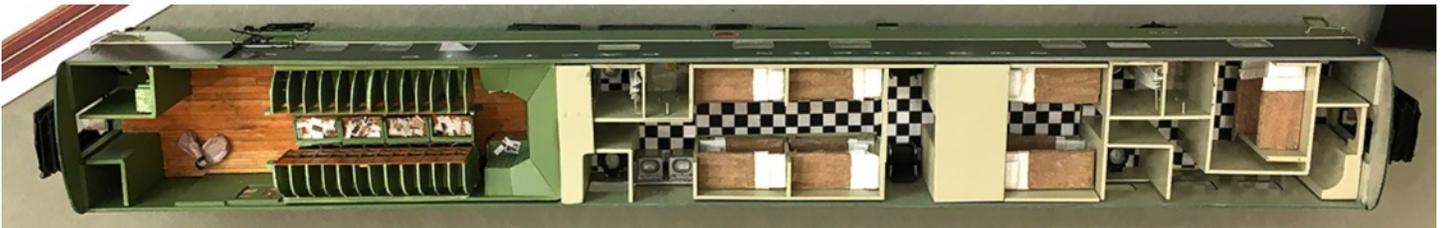
**THE O RESOURCE**  
NEWS, REVIEWS, INFORMATION TO USE  
**ONLINE MAGAZINE**  
**SCALE**

# CHICAGO O SCALE MEET CONTEST RESULTS

Another Chicago O Scale Show has come and gone. Once again this year, we at *The O Scale Resource* sponsored and ran the model contest. There were some new faces this year, and as in year's past, we used three judges, closely following NMRA judging standards, along with a single public popular voted Best in Show.

There were a few categories that did not have entries such as Heavy Electric, Gas-powered and surprisingly Diesel locomotives. But, what may have been lacking in numbers, was made up for some beautiful model building. So let's get to the results!

## Passenger Car Model



## First Place Passenger Car

Northern Pacific Postal/Dormitory #428

Entered by: David Schultz

## Passenger Car Category



### Second Place Passenger Car

GN Wood 70' Coach #671  
(built in 3 weeks/2 days)

Entered by: William Flint

### Third Place Passenger Car

Milwaukee Road Skytop #189

Entered by: James Schultz



## Non-revenue Category



### Single Entry Non-revenue

Colorado & Southern #089 (On3)

Entered by: Robert Stears

## Traction/Trolley Category



### Single Entry Traction/Trolley

Chicago Surface Lines #1465

Entered by: Richard Nielsen

## Single Structure Category



### First Place Single Structure

Ghost Town Office

Entered by: Gregg Cygnar



## Single Structure Category



### Second Place Single Structure

Abandoned PRR  
Crossover Station

Entered by: Attalee S.  
Taylor

## Display/Diorama Category



### Single Entry Display/Diorama

Derelict Repair Shop

Entered by: Gregg Cygnar

# Caboose Category



## First Place Caboose

SP C-30-1 Caboose

Entered by: James Harper

Also Voted  
**Best of Show**

# Caboose Category



## Second Place Caboose

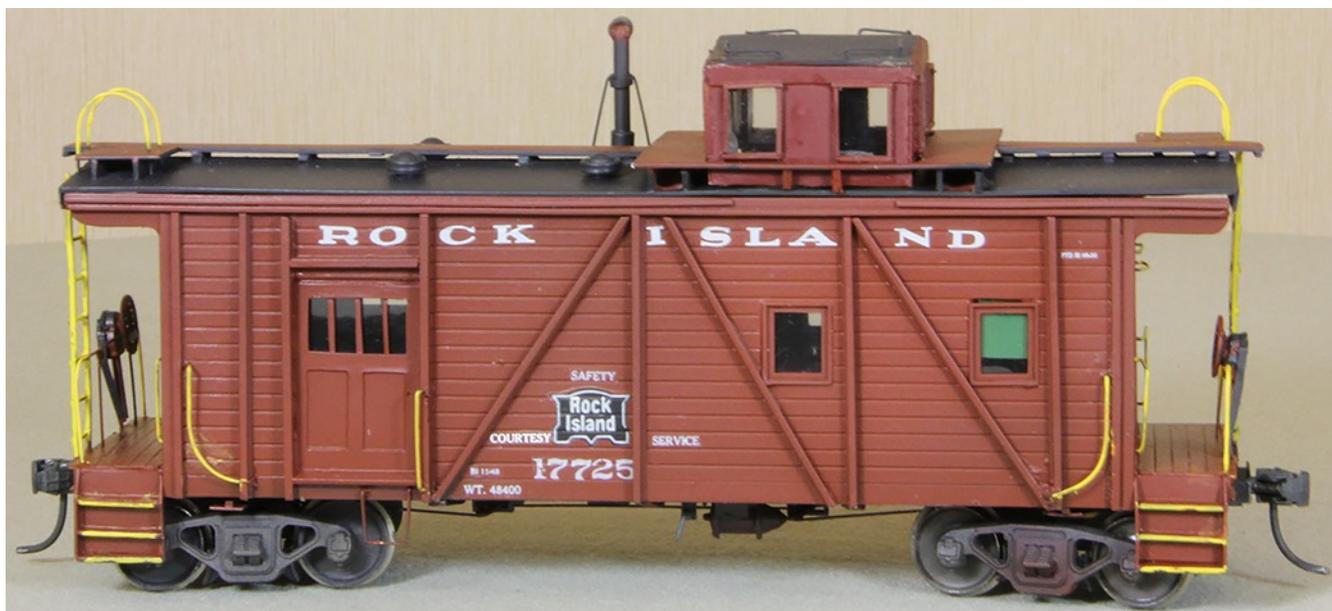
Colorado Central Way Car # 026552 (On3)

Entered by: Robert Stears

## Third Place Caboose

Rock Island Side Door #17725 (Only 1 built)

Entered by: Ed Neff



# Steam Locomotive Category



## First Place Steam Locomotive

NYC H-5g Locomotive

Entered by: Sam Shumaker



## Second Place Steam locomotive

Wabash 2-6-0

Entered by: Ed Truslow

# Freight Car Category



## First Place Freight Car and Overall Best Score

SP S-40-9 Harriman Stock Car  
Entered by: James Harper

## Second Place Freight Car

ILDX GE ACF 1958 cu/ft  
Covered Hopper  
Entered by: James Harper



## Freight Car Category



### Third Place Freight Car

ON3 D&RG Fruit Car c. 1887  
Entered by: Robert Stears

Below is a letter from one of the model judges regarding this year's contest, and what the judges are looking for.

Dan & Amy:

Some points to ponder about the model contest...First, thanks again for inviting us back. There was an interesting mix of models this year to judge. While not everyone is happy with the "NMRA" matrix judging, we feel in the end the best model(s) stand out.

For anyone entering an "NMRA Contest", remember that documenting is a big part of it. A picture of a prototype or inspiration for the model goes a long way. No need to write-up a thesis, but the judges need something to go by. Bring those plans/pictures.

Paint and lettering was a big factor this year. We had a few models that were close to merit award levels, but lost a few points due to the following:

- Wheel treads should be shiny/silver unless photos prove otherwise.
- Faces of wheels also benefit from paint.
- Older decals tend to be harder to hide the blush. Decal on/over a glossy surface, then work the decal into the surface with Solvaset, Micro-sol or similar.

Please understand that these are only suggestions. The modeler is always right! The models were all quite nice.

Sincerely,  
Mark Preussler, MMR No. 442

We want to thank Mark Preussler, Marvin Preussler and David Leider for coming in and judging again this year. We here at *The O Scale Resource* agree with Mark's assessment of why we use the NMRA matrix judging. The idea is to let the true model builders, kit bashers, and the like, shine and get credit for their work.



*Another look at James Harper's first place SP C-30-1 Caboose*

The models below did not win this year, but did face some tough competition. We would like to give them credit for entering, and hope these modelers continue their endeavors, coming back next year with new creations.



*1800's Baggage Car*

*Entered by Eugene Eberhart*



*Williams Molasses Company  
Double dome, raised roof walk tank car #609*

*Entered by Attalee S. Taylor*



*BN Cement Car  
Cascade Green*

*Entered by Bill Yancey*

# Display Only Models

There was also a table for display only models. There were models under construction, or or in the case of the Northern Pacific Z-3, Dale only wanted to show his modifications.

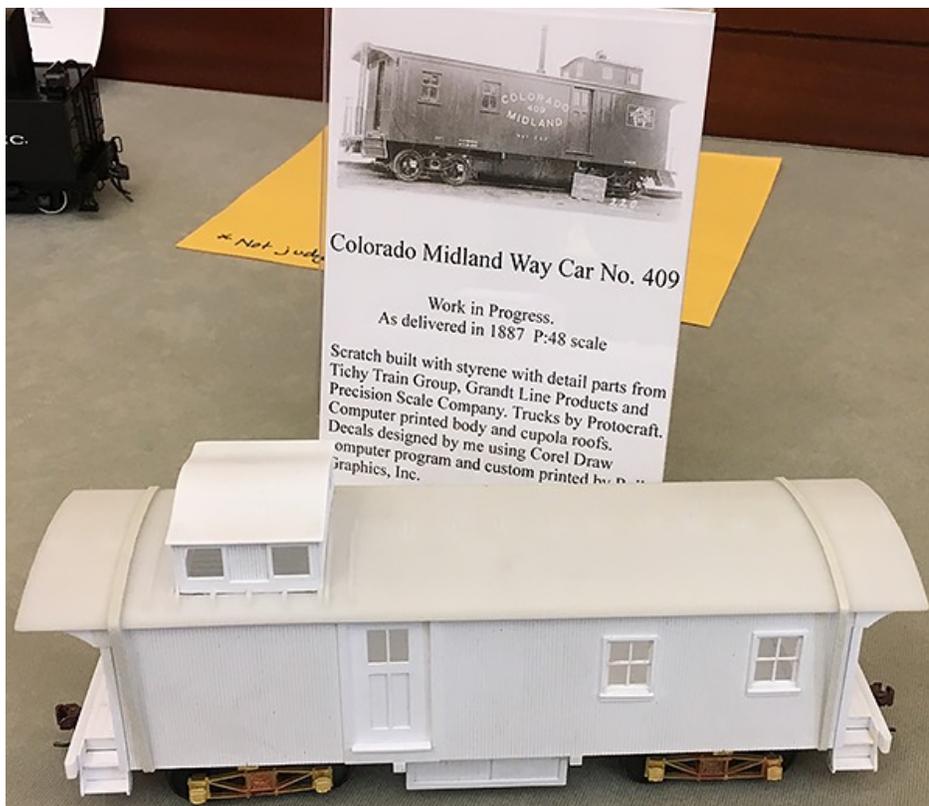


*Dale DeWitt's Northern Pacific Z-3 2-8-8-2 was 80% scratch built. Mechanism with modifications from a Sunset N&Y Y-3.*



*Robert Stears' CB&Q "Yellow Bird" 1905 Pullman Palace stock car (P48). Also his computer printed D&RG Krauss Maffei body in P48.*

# Display Only Models



*Robert Stears' model of an 1887 Colorado Midland caboose. Laser cut acrylic plastic with computer printed roof.*

## THE **O** RESOURCE SCALE

NEWS, REVIEWS, INFORMATION TO USE

**HERE IS HOW TO CONTACT US:**

**Phone: 815-584-1577**

**FAX: 800-783-0127**

**Email: amy@oscaleresource.com  
daniel@oscaleresource.com**

**Mail: The Model Railroad Resource LLC  
407 East Chippewa St.  
Dwight, IL 60420**

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

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

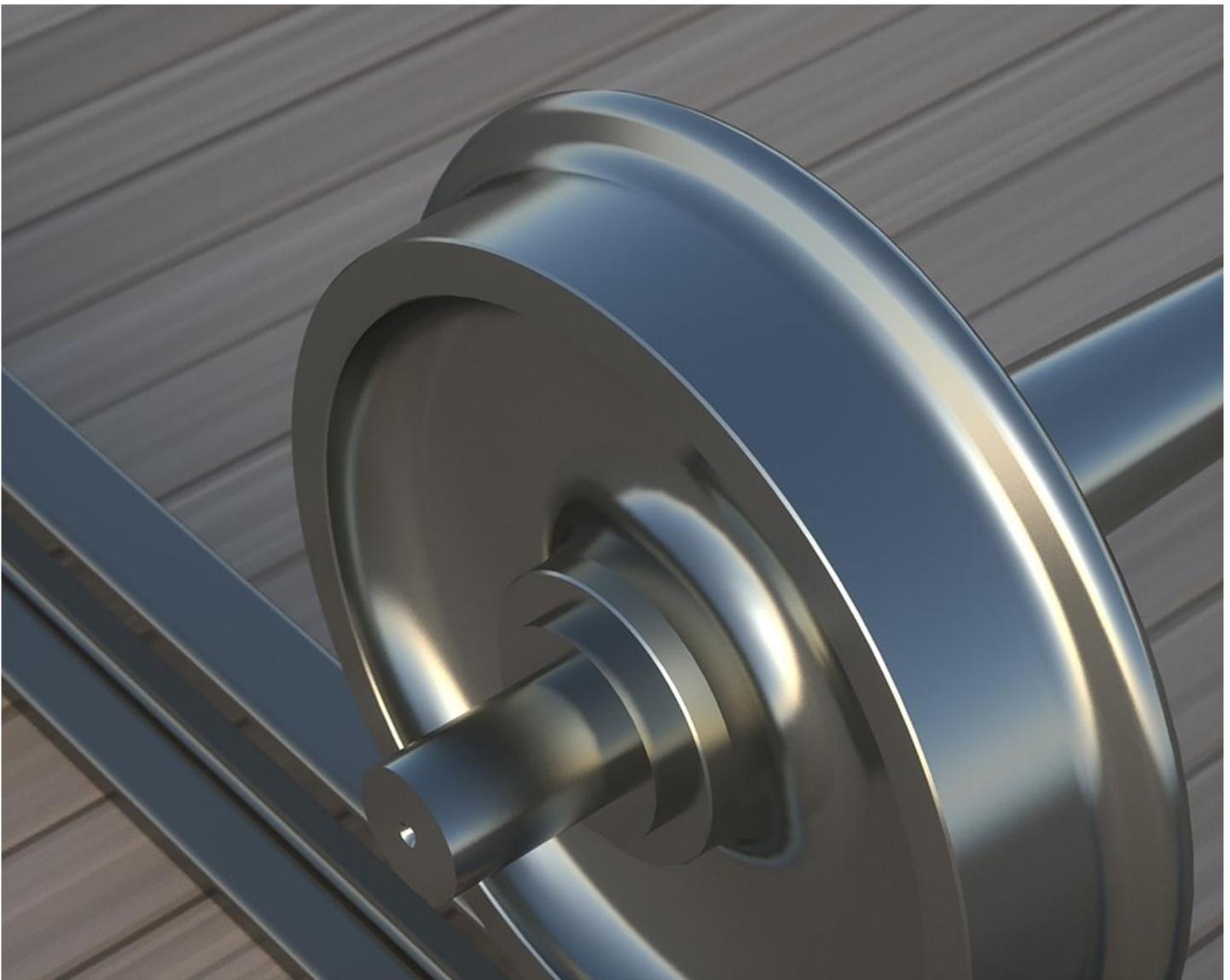
[www.sscaleresource.com](http://www.sscaleresource.com)

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

# What Are Low-D Wheelsets?

## 25 Years of Experiments

By Tad Daito



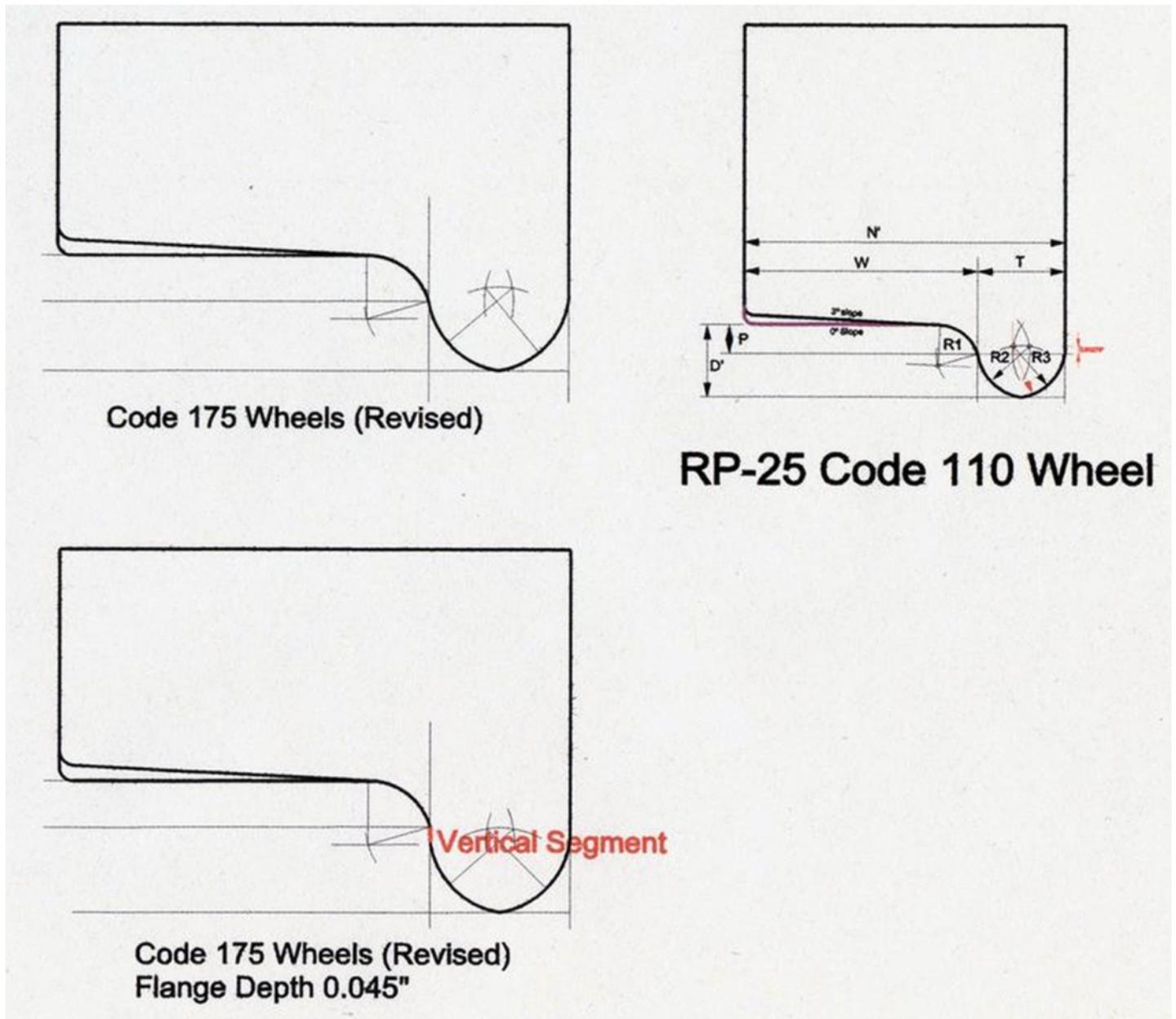
*Rendering by Bunji Izumi*

I was watching the UP mainline. Most trains are 100 cars. How can we pull long trains? What is the difference between model and prototype? Most people say, “The bearing is different.” Prototype has roller bearings. It is true. I bought small ball bearings to fix boxcars. When the freight car is full of lead weight, it rolls great. When empty, it didn’t roll well. Ball bearings have grease in them. The viscosity is not negligible.

How about pivot bearing? It is nice. Athearn Delrin trucks are the best truck in the world, except for wheel sets. The steel cone end is not good, and the wheels are wobbly. Still, they are much better than any other trucks in rolling quality.

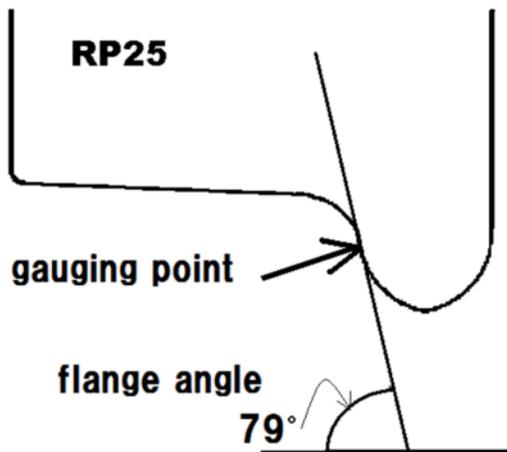
I decided to improve Athearn trucks. In the 90's, I made the RP25 wheelset. I referred the NMRA RP25 table. To my surprise, there is no way to draw code 145 and 175.

I referred to the NMRA RP25 1986 version. If you should have older version, please check on it. (D'-P) used be smaller than R2. Code 126 was OK. This means RP25 is for HO. NMRA is not for O! It is apparent they've never drawn code 145 and 175. No one has pointed it out for years.



I contacted NMRA. Mr. Voss wrote back to me. Some numbers were changed. Also, he said to put **vertical segment** on the flange. This drawing was sent from him in 2009. What a stupid idea! He didn't understand about flange angle.

The most important thing for the wheel contour is flange angle . Flange angle leads the wheels on discrepancy on the track. Discrepancy is anywhere on the layout, and the biggest one is at the point of the switches. The tongue rail is not a needle point. Flange angle can lead the wheel to the right route. Using flange angle, we can avoid the possibility of derailment.



Derailment occurs by two factors in model railroading. The first one is climb-up derailment. It occurs when the flange cannot resist derailment force. The flange angle is too small and/or the coefficient of friction is too high. Second, is discrepancy at the joint of the rails. Discrepancy has to be absorbed by flange angle.

You can see Nadal's formula [here](#). Wikipedia's description is not bad. This formula is to predict wheel-climb derailment. Hitting the essentials: **the bigger the flange angle, less derailment**. However, 90 degrees makes derailment by discrepancy. And one more, **smaller friction material allows smaller angles**.

RP25 was introduced by Mortimer committee back in 1960's. That consisted of putting fillet between tread and flange. Very strange picture was there. It says, to negotiate discrepancy of bad track, fillet works. This is wrong. To get over discrepancy of rail, flange angle works.

× fillet      ○ flange angle



I made RP25 wheelsets enlarged 1.15 times from code 126. They were made of stainless steel because the coefficient of friction is smaller than any material available. I was able to find a lathe shop to work on stainless steel. The pivot cone was made very precisely.

I ran them on my layout. It has 9-foot radii, and is a medium size layout. I ran my train for 2 hours every day. The Delrin truck was lubricated with a thin coat of molybdenum grease. The combination of stainless steel and Delrin is much better than I expected.



After 13 years, I removed the RP25 wheel set to take a picture. This shows the flange is touching to railhead. You can see the trace. This shows "2-point contact" on the rail head. The velocity at the flange and at tread is different. This means the difference makes loss on curves. Model railroads are very different from prototype. Models have steep curves. Curve is everywhere. If I could reduce friction on curve, I should be able to pull more cars.



To reduce the flange angle, it can escape from touching railhead. I enlarged to draw RP25 code 126 contour carefully. The flange angle I measured was 79 degrees.

This angle is too steep! If we could reduce to 63.5 degrees, railhead should not touch flange on 6 foot radius. A smaller angle may make climb-up derailment. Nadal's formula says, smaller coefficient of friction allows less angle. I measured the friction factor of stainless steel on steel rail. It was 2/3 of steel to steel. I calculated various cases to prove that lower angle stainless steel flange works much better than RP25.

Please look at the picture. This is Low-D. No trace to have touched on flange is found. This picture was taken after 11 years of every night operation. Fillet is larger than RP25. This works to reduce resistance on curve. With or without this larger fillet, experiments showed positive difference.

Required tractive force to pull 30 Athearn boxcars on tangent track  
 Car weight is 12 oz. each. Both RP25 and Low-D are made of stainless steel.

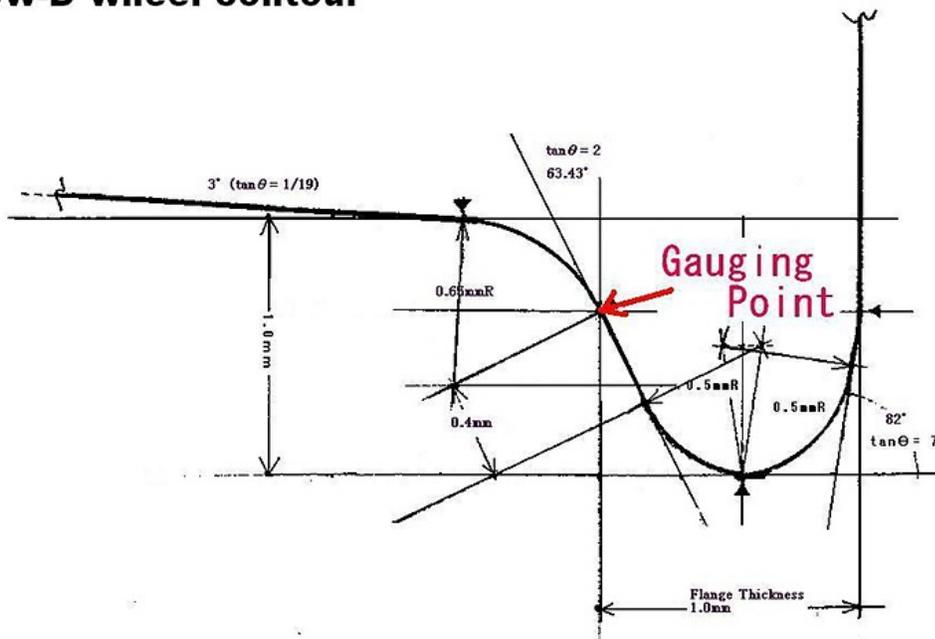
	RP25		Low-D		ratio
straight track	1.6 oz.wt.	0.46 N	1.6 oz.wt.	0.46 N	1.0
120" radius	2.4 oz.wt.	0.69 N	1.7 oz.wt.	0.48 N	0.69
96" radius	2.8 oz.wt.	0.78 N	1.8 oz.wt.	0.51 N	0.66
72" radius	5.0 oz.wt.	1.4 N	2.3 oz.wt.	0.65 N	0.49

Here is the table to show the difference. To measure the resistance is very hard. I have built 30 Athearn boxcars for this experiment. A pull meter was set on a flatcar. A small engine was started to read the force. The test was very much successful.



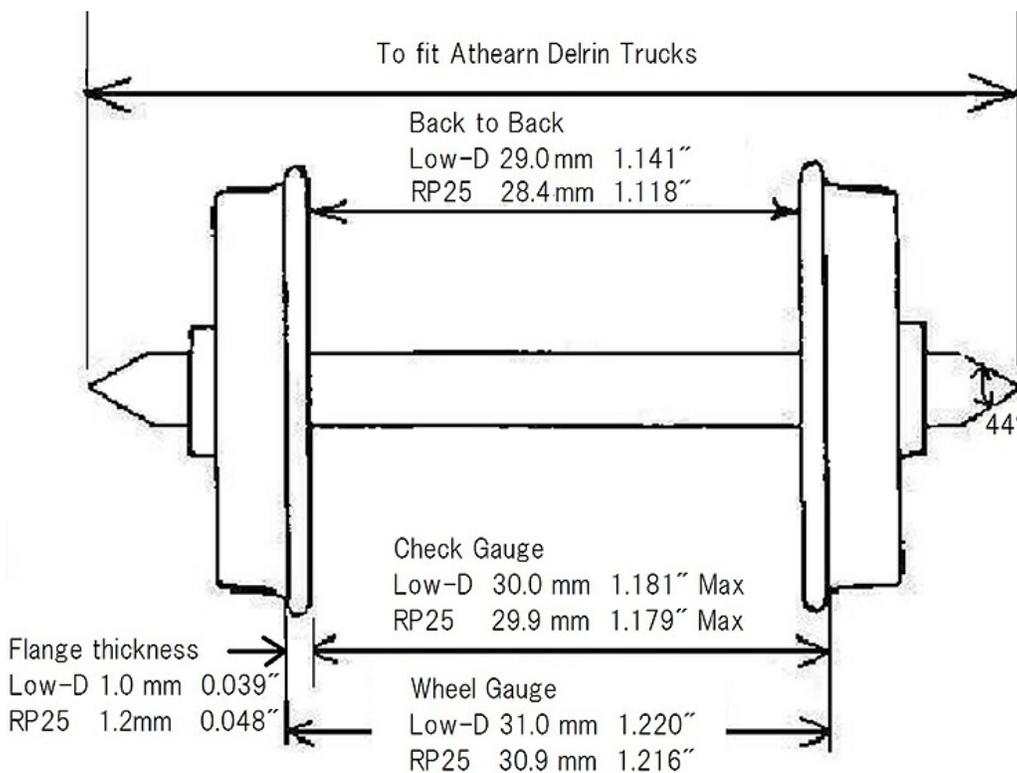
I contacted a subsidiary factory of Toyota Motors. They were very busy. It was very difficult to ask them to make wheelsets. However, they have ups and downs. In recession, I visited them. They welcomed me. I made 10,000 sets, paid in cash. They were pleased. After that, I can now order from them even in small lots. Now in Japan, Low-D wheelsets are de facto-standard. I have produced more than 32,000 wheelsets, and 4,000 have gone to the US.

## Low-D wheel contour



Low-D are not toy wheelsets. Some model wheelsets are wobbly, and most of them are plated. Plated wheelsets do not have smooth tread. Plated tread reflects light; however, their surface is porous. That makes noise. If one car with regular plated wheelsets should run on my layout, I could point it out easily with my eyes closed.

Low-D is turned by the world's best lathe available. Absolutely, no wobble, very quiet wheelsets. It is a top quality industrial product.



I made pivot cone versions and shouldered journal versions. The latter is to be accommodated in 2 mm inside diameter ball bearing. Some of the heavy brass passenger car's weight exceeds 4 lbs. For those, I use ball bearings. Through 25 years experience, I can tell that for freight cars with less axle weight than 4 oz., pivot cone is best. Cone end should be just fit to the truck, I made a special tool to tune the pivot hole. A very small amount of molybdenum grease works great even in plastic trucks.

Mr. Sofue's engine has Low-D wheels on tender trucks, some is used on

leading truck, too. On the centipede tender, Low-D works to prevent derailment. As you might know, that tender type tends to derail when backing up. Coefficient of friction is big enough to allow climbing the flange up. With Low-D, there is absolutely no derailment even when pushing 80 cars.

I have made 33", 36" and 40" wheelsets. 40" is shouldered journal only. To use Low-D on engines is not recommended because the friction is too small.

Less flange angle makes moving the gauging point outward slightly. This means "back to back" becomes slightly wider. Of course, this difference is allowed by NMRA Standard.

When I started this project, some of my friends who were working for real railroads flouted (mocked) me saying: “It is misleading. Fillet has no meaning, just eliminating possibility of breakage from stresses in a contact area loaded.”

“It’s working to escape from touching the flange on railhead,” I replied.

He says, “Train turns curved track by flange. Bigger fillet makes bad riding quality.”

I know that. I have visited Tehachapi loop many times. I saw flanges touching. Flanges were wet with grease.

Our model is to be greased? Rail head should be dry, or the engine slips. Then I asked him, “Have you ever seen a railroad that has stainless steel wheelset?”

“Absolutely, NO.”

I showed them the two pictures on the following page. He’s never criticized Low-D since then.

This Low-D is a completely new idea to run MODEL RAILROADS, not an idea for real railroads. No one is riding in the car. Riding quality is not a problem. Period.

I’m a scientist, everything is verified by experiments. I formulate the hypothesis, then proved it. I eliminate prejudice. I do not believe textbooks.

These pictures were eloquent enough to make my friends shut their mouths.

Important points are:

Smaller flange angle

Larger fillet

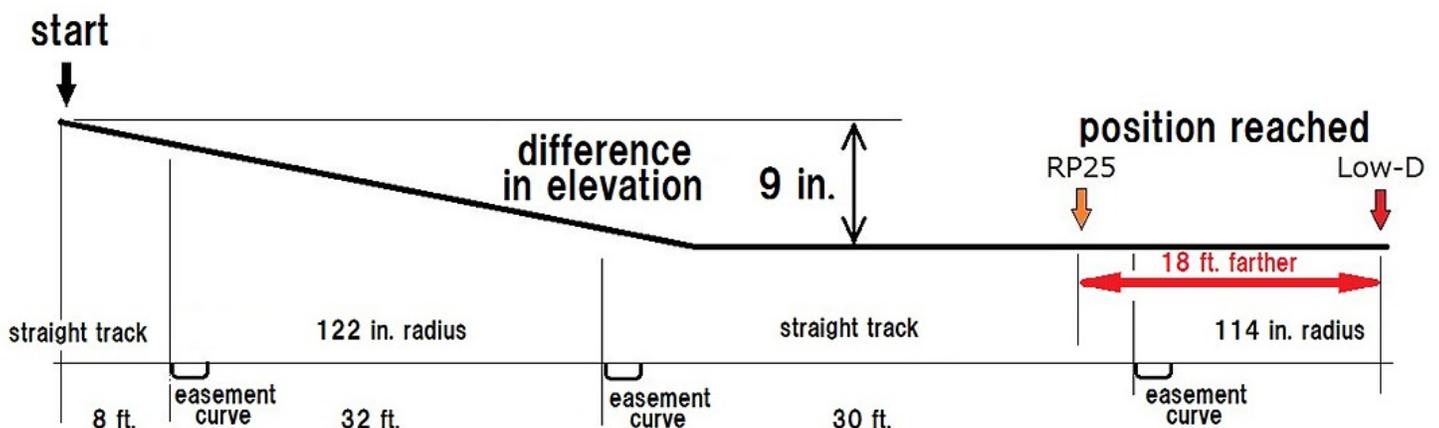
Low coefficient of friction material (stainless steel)

Precise machine work

In my museum, a Max Gray AC-9 pulls 117 cars with ease at 0.6 Amps. On a 1.6% grade, 1.0 Amp. Every 40-ft car has 13 oz. weight. A 50-ft car has 16 oz. Total weight of the train is more than 100 lbs.

Who can believe this? As a magician would say, “Nothing up my sleeve.” Every time, I say this. To reduce friction is the most important thing.

[You can watch the video.](#) This shows how Low-D rolls well. Start point is at 0:07 seconds.





*These wheelsets were used for more than 10 years on steel rail. The difference is apparent.*

## **Depressed-Center Flatcar**

Designed to carry heavy and/or tall loads, the 40', 90-ton depressed-center flatcar is a unique car that will attract attention. Railroads ordered the castings and built their own cars, so details varied. At least the NH, C&NW, Southern, and NYC had these cars.

The unpainted kit consists of high-quality, no-odor urethane castings for the body, and brass & urethane brake components under both ends of the car. Easy assembly with ACC or epoxy. Less decals, trucks and couplers.

#19209

\$ 79.95

**B.T.S.**  
Better Than Scratch!

1782 Trinity Rd  
Belington, WV 26250  
304-823-3729

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

\$5.00 S&H in the US



# *It's Auction Time!*

**By Daniel Dawdy**



As many of you know, a while back, the O Scale community lost a great mentor and a fine gentleman in James Seacrest. His extensive collection of O Scale models went to Stout Auctions of Williamsport, Indiana. Stout is the largest auction house of its type, dealing mainly with toy trains (I hate the word toy, but is what it is), and predominantly the three rail market. They have always had some two rail O Scale mixed into some auctions, and I, myself, have bought a few items using their on-line bidding. However, this was their first major two rail auction. I decided to make a phone call to Stout to see if they would allow me to come in early, look around, and see just how these auctions all come together. Derek Thomas, who many three rail people may know from his book *The Madison Hardware Story*, *Notch 6 Podcast* and *The Madison Poster Company*, is the Chief Operating Officer of Stout Auctions in Indiana. Derek was more than welcoming of my idea, and on Friday, April 7, 2017, the day before the first of three Seacrest auctions, I headed to Williamsport.

Let me step back for just a second. When Amy and I lived in Lisle, IL we went to many auctions, from farm to estate and everything in between. We also had an antique booth where we sold many of the items we acquired. So, I know a lot about auctions in general and how they work. But, this would be my first specialty auction with on-line bidding, and what better way to learn than from this particular auction.

I arrived about 2:00 in the afternoon. There was an auction that day of HO and Lionel items. As I came up to the building, I was expecting many cars in the parking lot. Well, no, there were maybe eight and that must have included the staff. Maybe the auction was over? I went in and it definitely wasn't over, it was going strong. I learned my first lesson, very few people turn out in person for these auctions. Most do on-line bidding in real time. I walked up to the receptionist, Samantha Fowler, (although I am sure she wears many hats) and asked for Greg Stout or Derek. As the auction was in process, I figured Greg was auctioneering, so Derek came out and we started talking. He showed me around, and said I could take pictures of just about anything I wanted.



*Items above are being cataloged and will be in another auction of Jim's collection.*



*Items above and below are also being cataloged, and will appear in a future auction.*



I started in the back areas of the building where thousands of items, including some going into the next Seacrest auction, were being stored. Many were in the process of being cataloged which takes a tremendous amount of time.

So just how does this all work from the time the client calls until auction time?

Like most auction houses, Stout will get a call or referral from a client. The client will be given a list of associated auction costs before signing anything. In fact, the client may not get back to Stout for months after the initial consultation. In this case, there is a set commission which is between the client and Stout.

Once the collection arrives in Williamsport, the work begins in earnest. Every item must be opened, viewed, graded, and damage or changes noted and then photographed. Stout uses the [TCA \(Train Collectors Association\) grading system](#). While that may be new to many O Scale people, it has been the accepted norm in toy train collecting for many years.

Many items are not what they seem to be. As an example, many of the Pecos River Santa Fe cars were modified into another railroad. One of the cars I was looking at was a Pecos River Brass custom O scale two rail Richmond Fredericksburg and Potomac sleeper. It was clearly labeled in the catalog “*Lot 1188 Pecos River Brass custom O scale two rail Richmond Fredericksburg and Potomac sleeper. Pecos River Brass custom O scale two rail Richmond Fredericksburg and Potomac sleeper in original box. Car started life as a 1951 Super Chief Palm Leaf. Car is in C7 condition, the car has some fingerprints on the plating, appears to be glue residue. Box has some light mildew spotting. See photos for best description. \$200-400*”. This way, you the bidder, know the car was modified from it’s original state.



*Models are photographed multiple times for the on-line catalog.*

After going through each item and doing the write up, the item is photographed a number of times. Many items have four or more images showing on the Website. Items are reboxed and set into lots or singly. Also in the descriptions is an estimated range of sale price. I asked Derek about this as Stout does not have a large track record in two rail. He said looking at eBay results and other places such as Brasstrains.com and other outlets, they felt the estimates were close to what things would bring. For the most part, they were in the ballpark; but as we'll see, they missed a few.



*Wide shot of the items in the first of three auctions from Jim's collection.*



*Photo courtesy of Stout Auctions*



The catalog for the next auction is loaded online where you may place bids at any time. It's also loaded to eBay where you may also bid. In this past auction, most everything started at \$10.00. One exception was the Sofue Model Works O scale brass CB&Q O-5A 4-8-4 steam locomotive shown above, which did have a higher starting price.



*Norm Pullen from Norm's O Scale Trains made a long trip to be at this auction.*



*A few more familiar faces showed up the day before to check out items.*

Friday afternoon, and two hours before the Saturday auction, the bidding public could view and inspect the items. You were allowed to open the box, but not take the model out. Stout's on-line pictures give you most all the information needed about the item.

*Samantha Fowler*



*Greg Stout*





*Derek checking everything before the auction. Note the two wide screen monitors on each side of the table. These show the current item and lot number as the auction goes along.*



*Tina Terry, left, auctioneer Brian Cook, center, and Rachel Stout, right, work the auction. Brian and Greg take turns calling the auction. That's a lot of talking for one person.*

Now on to Saturday, it's auction time! If you signed up on-line, you were ready to bid. If you showed up in person, Samantha (opposite page) would take your information and tax ID, if applicable, and give you a bid card. Then we had a few donuts and a drink, patiently waiting for the auction to begin. Greg Stout (opposite page) started the auction promptly at 10:00 a.m. as advertised.

So we begin. First, the on-line early bids come in. The auctioneer then sees the second highest bid, and starts from there. The highest bidder then gets recorded and the auction opens to the floor and continues as live

on-line bids come through. I think there is a real misconception of how this works, so I'd like to explain it. Unlike a farm auction where a \$10.00 bid can be raised by a dollar, there are set bid raises in place. This is made very clear on the Internet side, as well as the auctioneer's call to the floor. For example \$50-\$200 bids are in \$10.00 increments, \$200-\$2000 bids are in \$25.00 increments, \$2000-\$5000 bids are in \$50.00 increments and \$5000 and up bids are in \$100.00 increments.

For informational purposes only, let's say I did an early bid on-line. The item was a Overland model 40 Burro crane. I bid \$1000 because I really, really, really wanted this, and I would not be near a computer the day of the auction. The item started at \$10.00, so my \$1000 bid bumped it to \$20.00. Now someone else comes in with a \$100 bid and the item now jumps to \$110, and I am still high bidder. Now we start the auction. The second highest bid shows at \$100. Now my bid comes in at \$120 and away we go. Bids from the Internet come in, as well as from the floor. The auctioneer will point to the monitor showing an Internet bid, and then look back to the floor. If the floor bids, it's entered and because my bid was so high, the floor is out and I am high bidder. The point here is that unless the floor or another Internet bidder goes past my \$1000 bid, I am good. Also, if the bidding stops at say \$450, I am good and that is my price. The bidding does NOT start at my highest bid. Some people have a hard time understanding that. As for payment, there is a buyer's premium based on how you pay, if you are Internet or in house, plus tax unless you have a tax ID for resale. If you don't like the

idea of a buyer's premium, then don't bid. Seems simple to me. Here is a quote from a forum author unnamed: "Buyers Premium.....One of the great all time RIP OFFS. The buyer is getting NO service from the auction company, so why should he pay a premium?" The buyer who can sit back in their bathrobe and bid from their home able to see the pictures and read the descriptions IS getting a service. Yes, there is a commission, but that does not cover all the time involved, the Internet fees, the full time staff, building overhead, etc... And remember, Stout's alliance is to the client. Just as I am sure if it was your family, they would want the highest return on their loved one's collection.

## THE MODEL RAILROAD RESOURCE

PUBLISHERS OF  
*Video Extra*  
THE **O** RESOURCE NEWS, REVIEWS, INFORMATION TO USE  
SCALE  
www.oscaleresource.com

THE **S** RESOURCE NEWS, REVIEWS, INFORMATION TO USE  
SCALE  
www.sscaleresource.com

*Click above to watch a bit of the action.*



*Yes, Stout even fed us!*

I shot a little video of some of the action. It moves fast. If bidding on-line, you get a fair warning and if no one else bids, that's it. Notice how Greg looks over to the right to check the on-line auction and then back to the floor for bids. Sometimes many on-line bidders will be bidding so he'll have to wait to go back to the floor for bids. The monitors show the picture and lot number of the items up for auction.

About 15 people showed up in person for this auction. However, if you were on one of the Internet forums, you may have seen this: *“All motel rooms sold out within 100 mile radius from auction site.”* You have to love forums. In reality, there is no reason to be there in person. If it’s going to cost more to get there than the shipping costs and slightly higher buyer’s premium of what you are after, and not knowing if you will be the high bidder, stay home. Of course, you will miss the free food and drinks Stout provides! Most of the in house bidders were resellers or people who really wanted to look at a few specific models.

Remember I said that Stout gave a range of estimates and most were close? Well, here’s an example of how much someone really wanted the following item: Lot 982 Pair of Pacific Limited O scale brass Missouri Pacific PL-3500 A & B 1932 ARA steel boxcars Pacific Limited O scale brass two rail pair of Missouri Pacific PL-3500 A & B 1932 ARA steel boxcars in original boxes. Cars are painted and decaled without trucks installed, C8-9. Boxes have some light label wear. Estimate: \$150 - \$250. Final hammer price without premium and tax, \$825! Wow, someone really wanted those. That’s what makes auctions interesting. Look at the three lots below:

Lot 1152 - Estimate: \$160 - \$275

Description: Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman NIB  
Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman new in the box C9-10, box has mild wear.

Realized Price: \$140 Unverified

Lot 1153 - Estimate: \$160 - \$275

Description: Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman NIB  
Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman new in the box C9, only removed for inspection. Box has mild wear.

Realized Price: \$90 Unverified

Lot 1154 - Estimate: \$100 - \$200

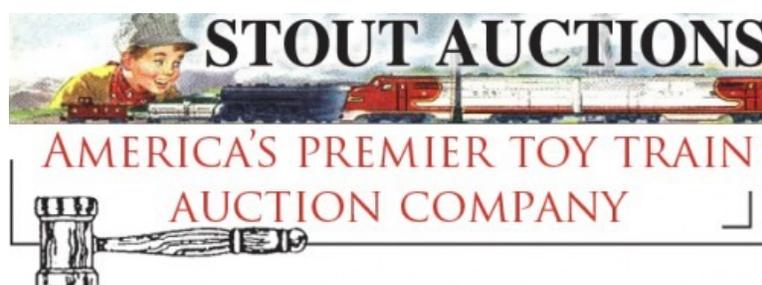
Description: Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman Sunset Models O scale brass two rail unpainted New York Central 4-4-2 Pullman in original box. Car has some tarnish spots on the roof and side. C7-8. Box has mild wear.

Realized Price: \$160 Unverified

The first lot went for \$140 (note that all prices are considered unverified until paid) with a C9-10 rating. The second lot with a C9 rating went for substantially less. I might have expected that as the first bidder has what he wanted. The third lot with a lower rating of C7-8, went back up and not down as some may expect. Maybe someone on the Internet thought they better get it as they lost the first two. Who knows?

All results are on the [Stout Auction Website](#) so anyone can study just what prices are doing in the market, anomalies and all. The next auction of the Jim Seacrest collection will be held May 12<sup>th</sup>, 2017 in Williamsport, Indiana.

I want to thank Derek and Greg for allowing me to roam around, ask questions and take pictures. All in all, it was a great time and a learning experience. Is this the best way to dispose of a collection? It depends. In future issues, we’ll look at other options you have.



# TEXAS & PACIFIC No. 300 BAGGAGE DORMITORY CAR PART 4



**By Bill Basden**

*Editor's Note: This month, we continue a multi-part series of articles by [Bill Basden of Delta Models](#) on his building of a Texas & Pacific Baggage Dormitory Car. In the [November/December issue of The O Scale Resource](#), Bill covered the prototype information. In the [January/February issue](#), he covered the tools and equipment he uses, ending with some of the car side layout. In the [March/April issue](#), he continued with the car fabrication and detailing.*

Part 4 will cover car body prep and painting with decaling, the interior part selection with painting and interior lighting using very sub miniature LED's.

## Car Body Preparation For Painting

*Figure 1 Grit Blast Gun*



We grit blast the entire body and underbody with 220 grit aluminum brown oxide purchased in 100# capacity. We do not have a blast booth, so I have to go outside and do this. This will clean up all tool marks, solder residue and rough surface finishes. This gives you a very good matte surface base for paint

adhesion as well. Once this is done, we go to the next step. Figures 1 and 2 show the equipment used. The grit blast gun is a Paasche model LAC #3 with a one quart hopper that is gravity feed, very similar to an air brush. Use about 6-8 inches from the model with 35-60 pounds of pressure. You must be careful doing this because the brass will get hot and possibly distort. We also have an air eraser model #AEC for small areas to use when painting. All this runs from a 1/2 HP compressor piston type. You will need a shower when done using this type of natural air booth!

*Figure 2 Air Eraser*



We bought our first cleaner back in 1975. The model we chose was for the model train market. It lasted until 1995; and when it came time to replace, we went back to L&R. **It pays to buy quality tools.** We have a very nice ultra sonic cleaner by L&R that is 650 watt 3 gallon capacity. This size is great for long O scale passenger cars or other models. We simply use very hot water with a cleaner degreaser solution and dish soap. The model is cleaned for approximately five (5) minutes and then washed off with hot water and air dried. When you look in the bottom of the cleaner tank, you will not believe what you have removed from the surface. And you assumed was good enough to paint, didn't you? Cleaning of the model is a very important step. Our current cleaner model is 17 years old and shows no signs of having to be replaced. These are very expensive, and this one was around \$1600.00 in 2001. It was acquired because of doing commercial model painting at the time.



*Figure 3*  
*Ultrasonic cleaner with work surface on top.*



*Figure 4*  
*Work surface removed to reveal cover.*



*Figure 5*  
*Large enough for our passenger car, the model is ready for cleaner. Solution clean time is five (5) minutes.*

## Painting – Masking – Color Application



Figure 6 above: Paint and thinners used on this project.



Figure 7 right: Tapes used, templates used for lettering placement, decals and striping tape.

Now that we have the car cleaned and ready for painting, all colors are pre-mixed using Scalecoat 1 and Floquil model paints. I purchased large quantities of paint when some brands were discontinued.

I prime the entire model with Scalecoat 1 MW gray, I like this because you can see the detail better when applying the different colors used. It will also show if you have areas that need to be redone. I bake the model in the oven at 175 degrees for 90 minutes – this gives you great adhesion to the brass. Then the color coats are done the same way, starting with the lightest colors to the darker colors.

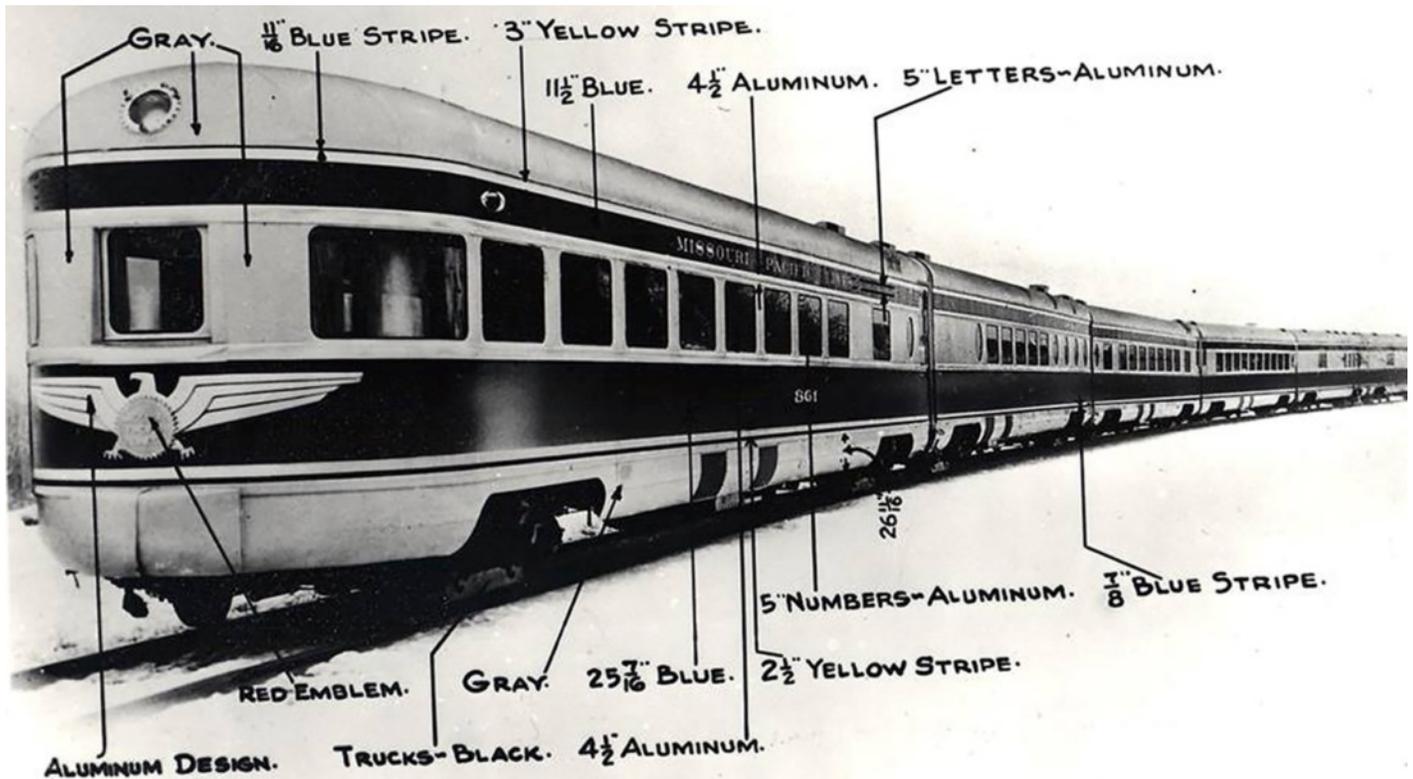
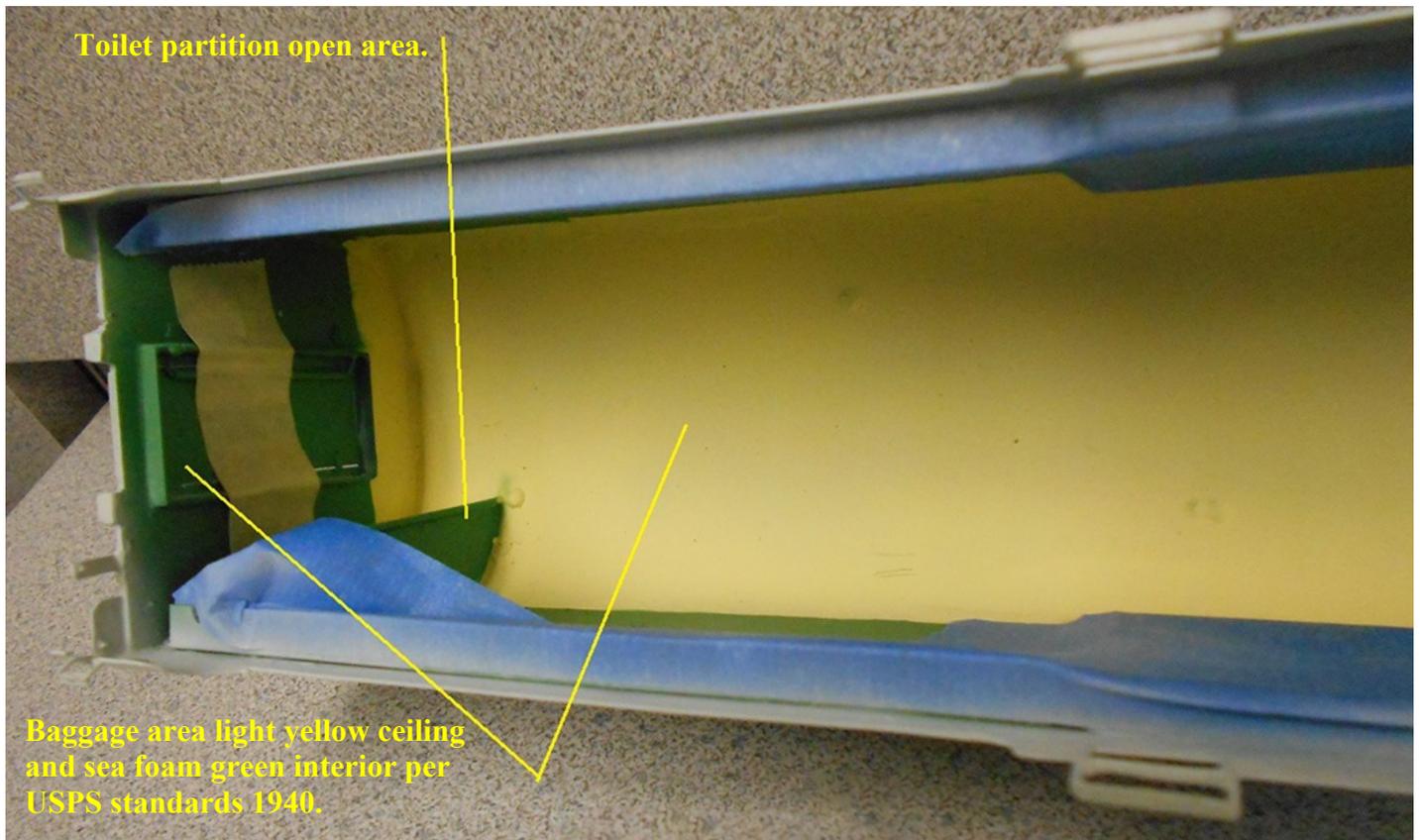


Figure 8: Missouri Pacific car painting diagram.



Toilet partition open area.

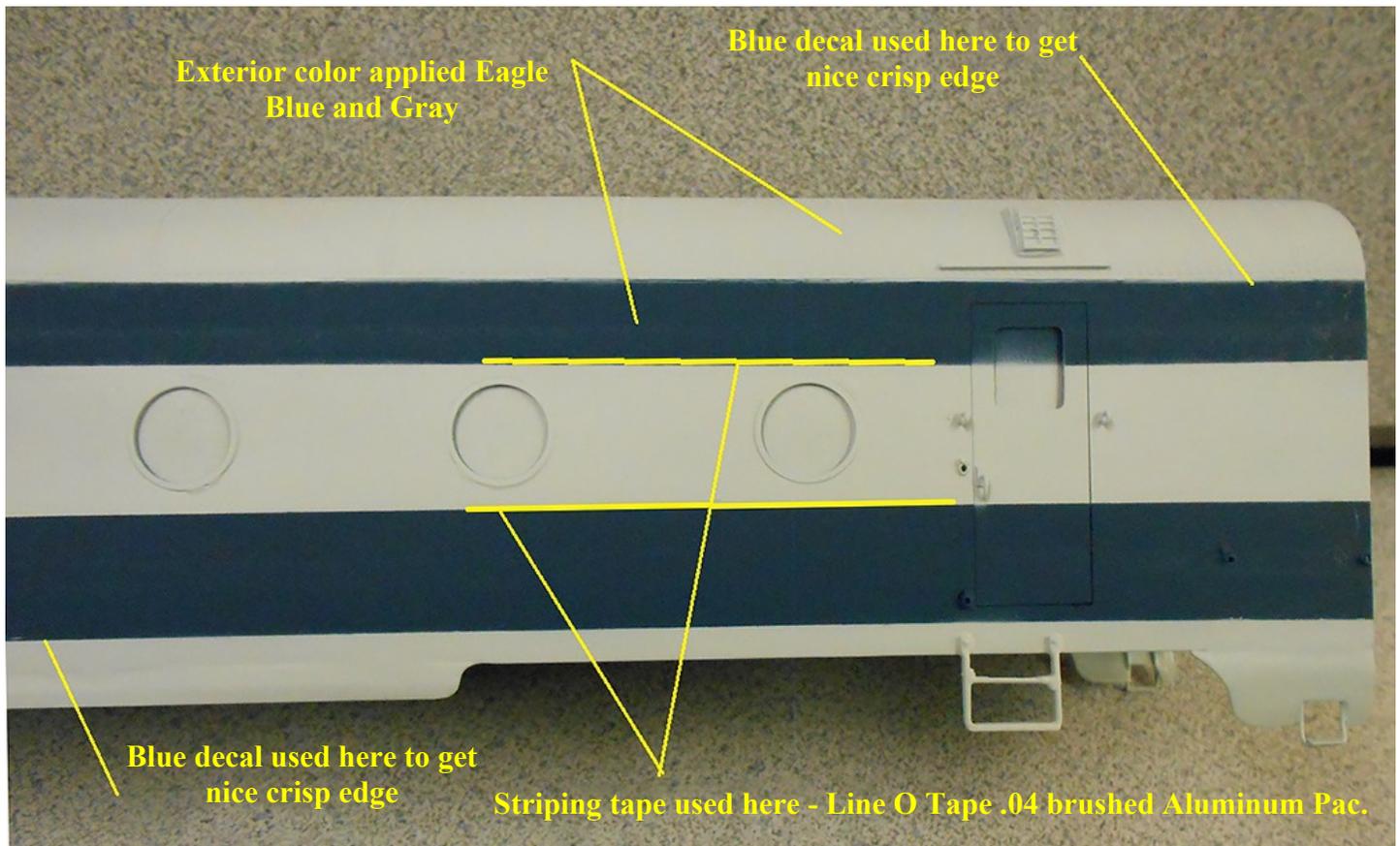
Baggage area light yellow ceiling and sea foam green interior per USPS standards 1940.

Figure 9: Baggage area



Baggage dorm area light gray walls and light yellow ceiling.

Figure 10: Dorm area



*Figure 11 above and 12 below: Baggage dorm end.*



OK we now have all the paint applied and need to clear coat for decal application. The clear coat I use is crystal coat by Floquil. this dries fast and is very hard. I will assume you have your method of decaling nothing special about mine. The one note I want to make. for years we have been using what the makers called silver. I have really hated it and found a very good replacement. the Missouri Pacific used a chrome type Molding add on above and below the windows. It is Line O tape striping tapes 04 Brushed Silver. Comes in 120" rolls. Looks out standing, and saves a lot of time. This product comes in many colors and sizes. Once all the decaling and line O tape has been applied I give it 2 more coats of clear. All interior paint is left flat.



Figure 13: Passageway side



Figure 14: Crew side

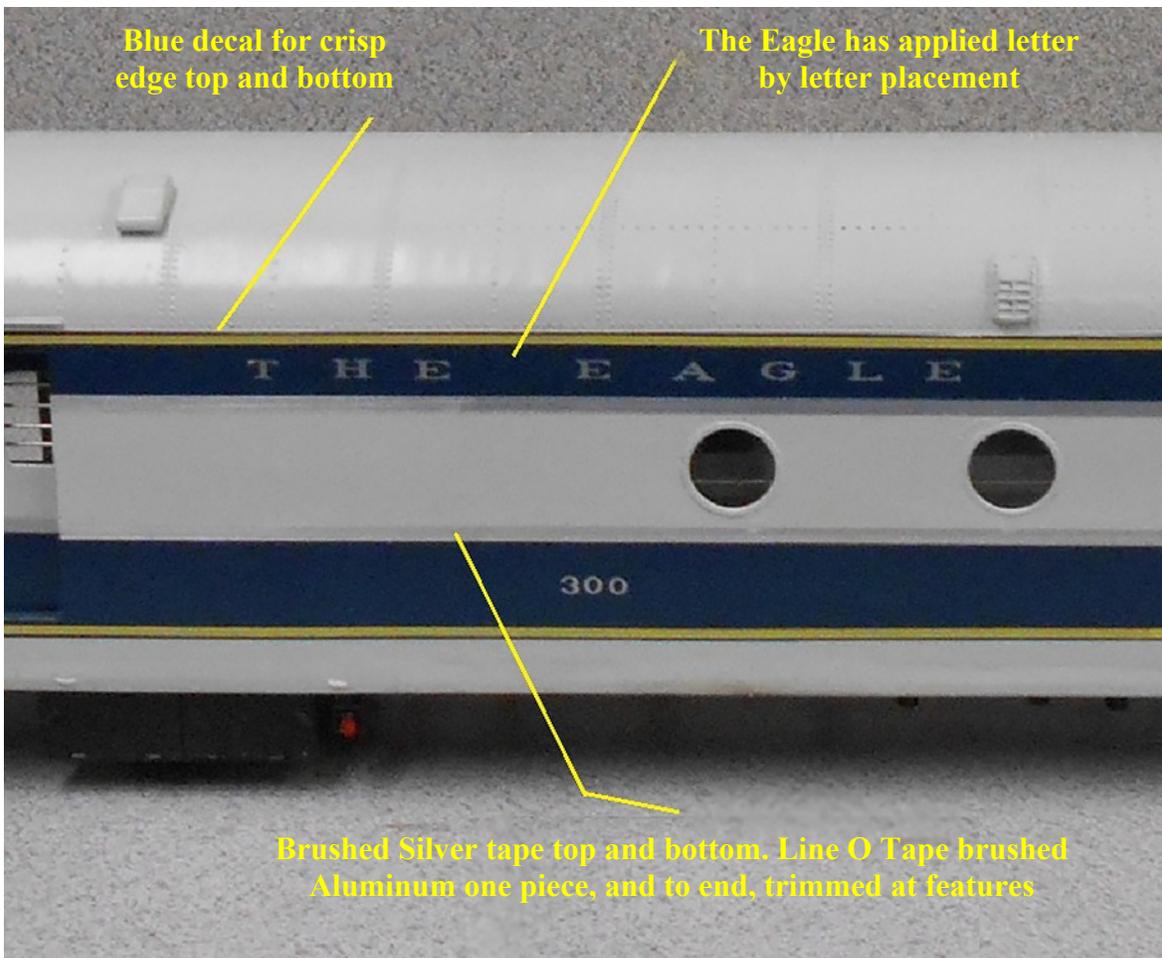


Figure 15: Card templates used here.

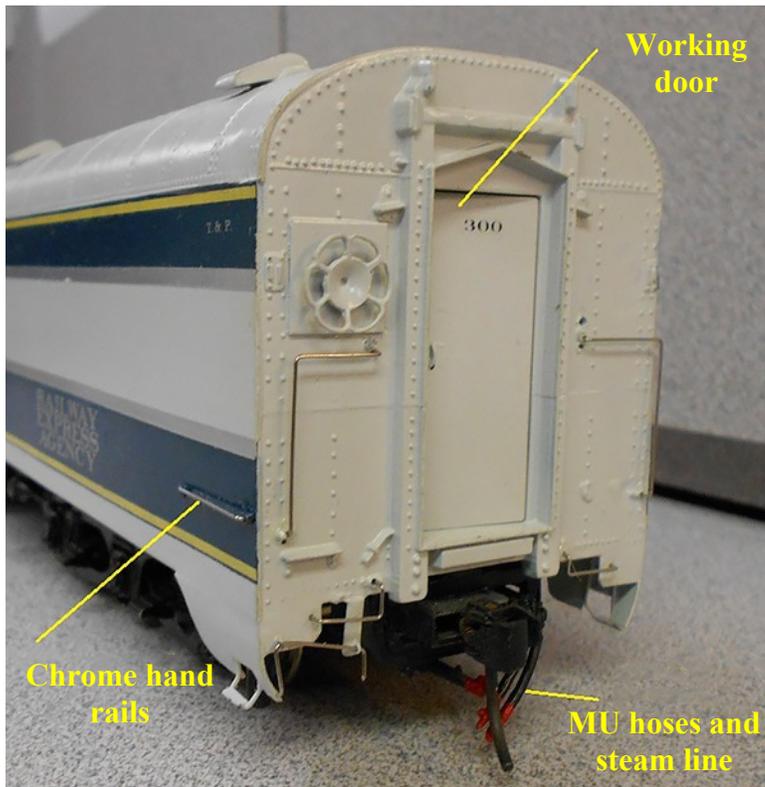


Figure 16 Baggage End

Figure 17 below:

*Baggage compartment with steel plates, wood flooring and a work desk. Note the contrast of the brushed silver strip with the decal on the door.*

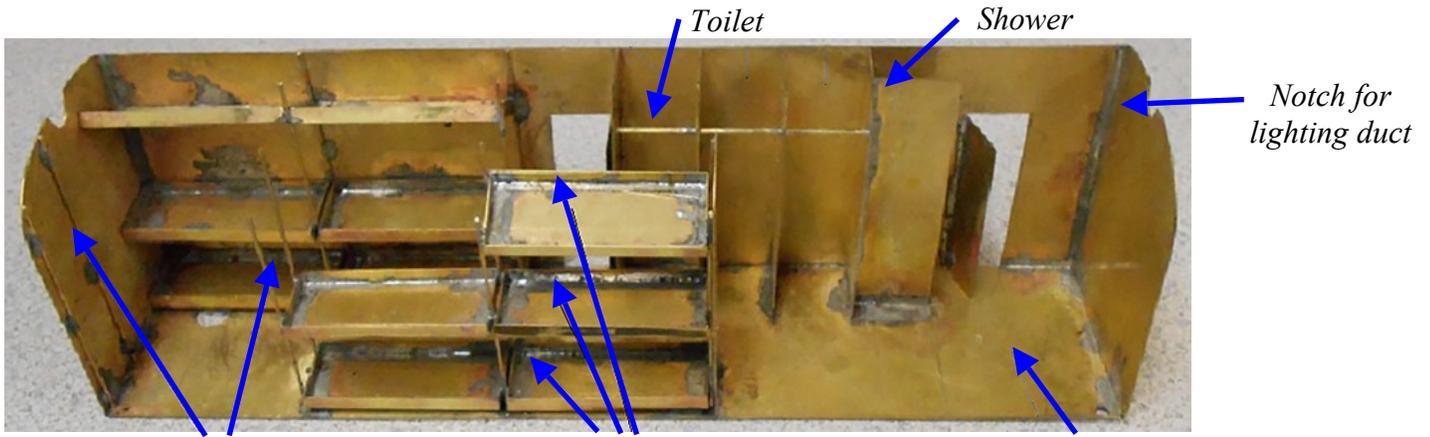




*Figure 18 left:  
Working baggage door  
with steel window  
bars, wood flooring  
finished with clear  
poly coat and vertical  
safety bars.*

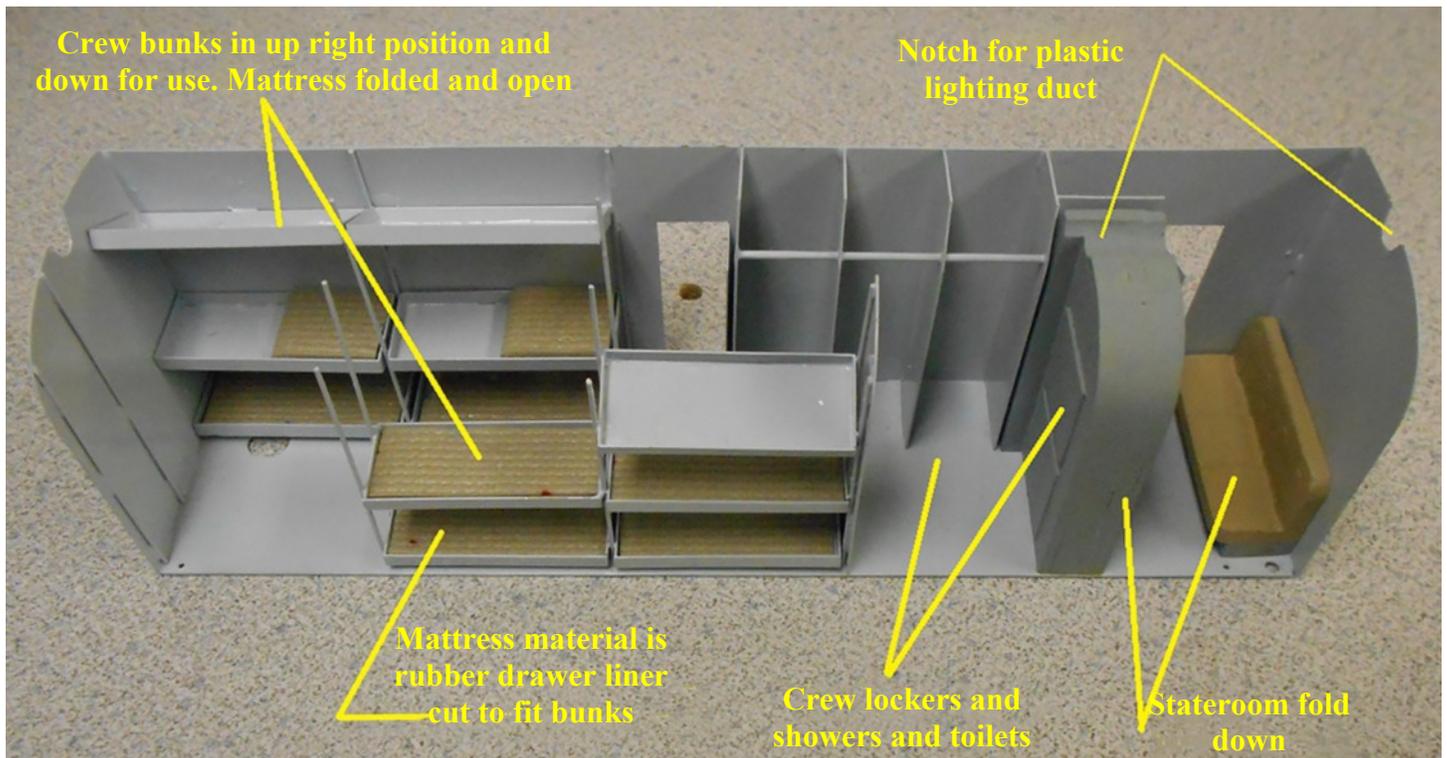
*Figure 19 below:  
Note how the bright  
silver stripe contrasts  
to the regular decals  
and as shown in  
figures 17 and 18, in  
areas such as doors.  
They did not use the  
molding, instead  
applied silver paint.*





*Bunk support stanchions    Crew bunks 30" x 72" (I only put in what could be seen from window on door.)    Stateroom area*

*Figure 20: Crew quarters before painting. To me, soldered brass is the best way to go. I used to make these from styrene, but it would come loose over time. All modules are screwed to main floor with 1.0mm screws.*



*Figure 21*

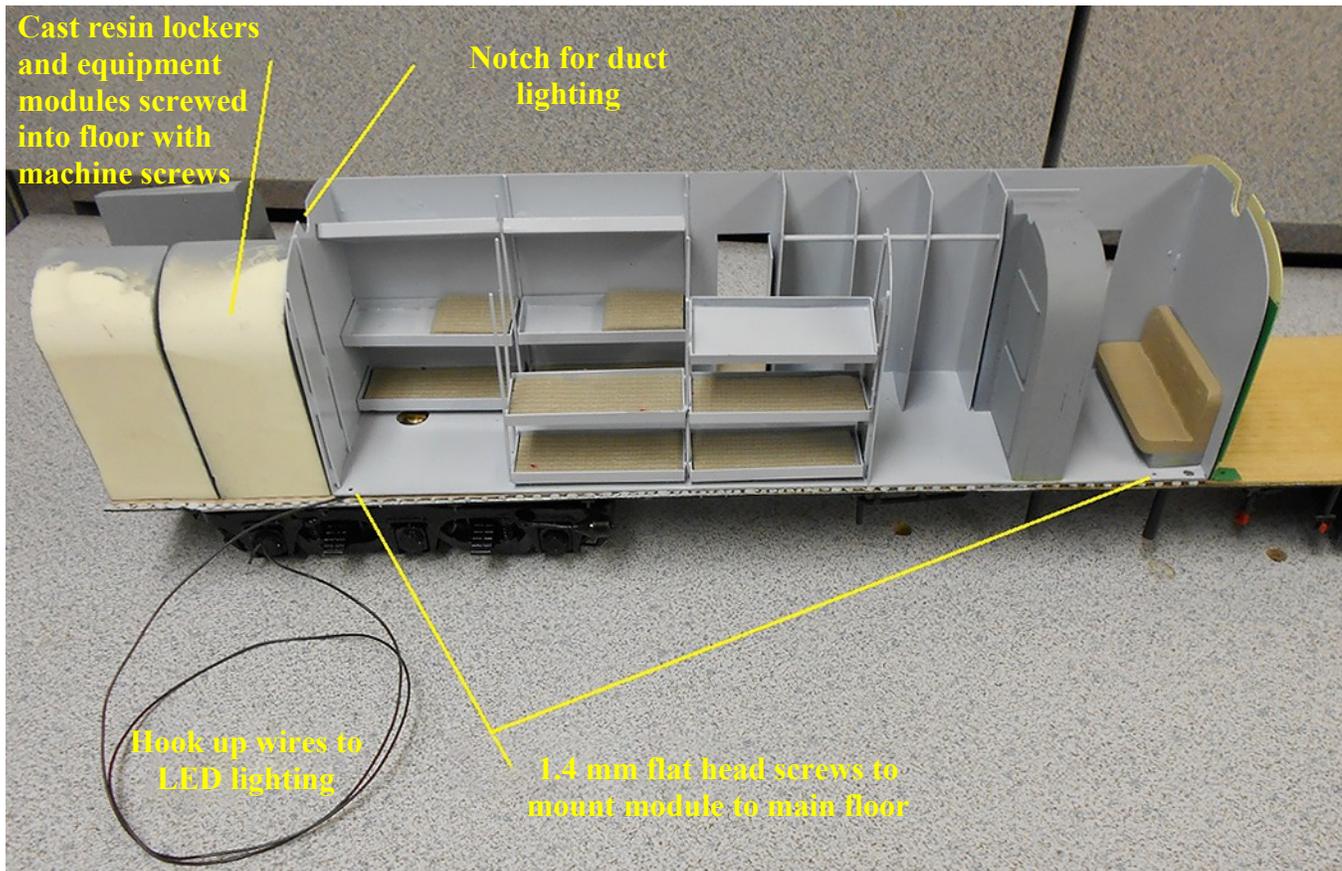


Figure 22 above

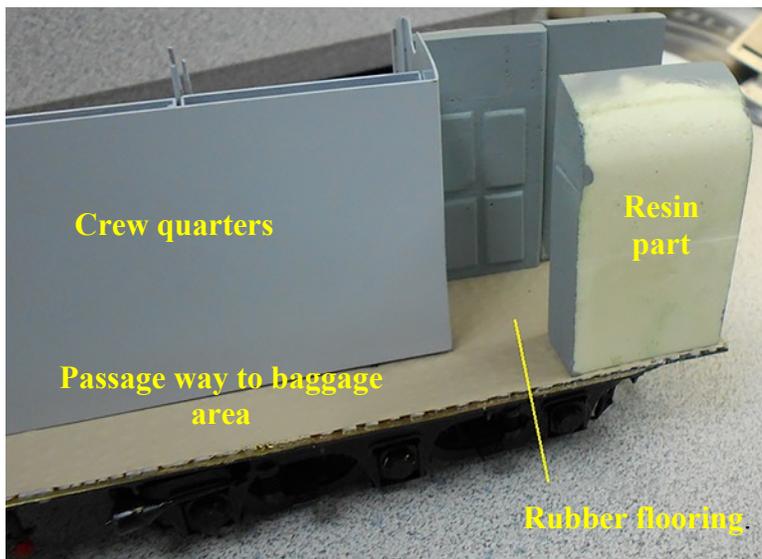
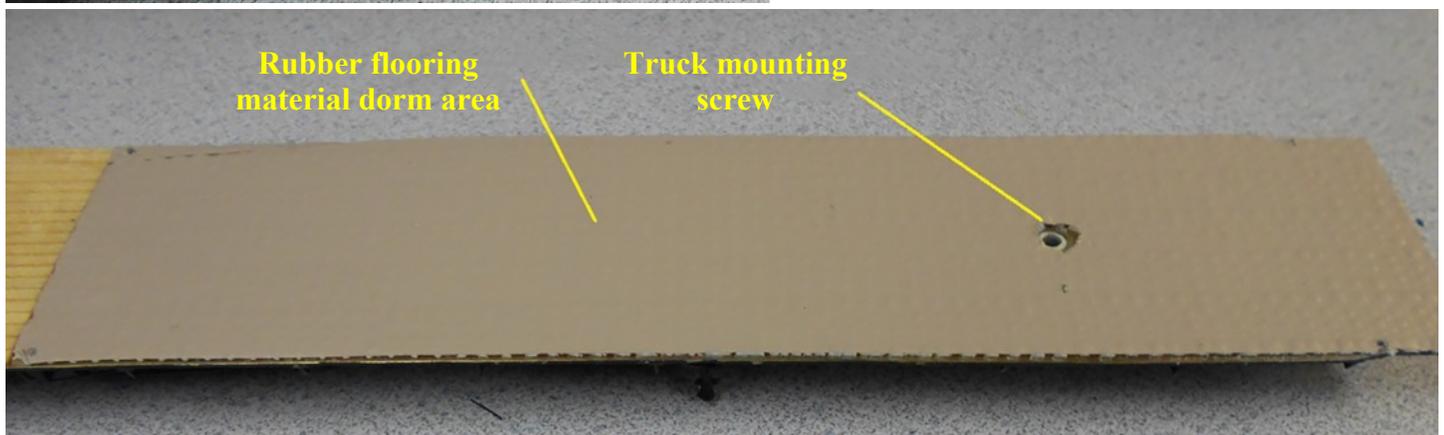


Figure 23 right

Figure 24 below: To me, when doing flooring material, it is easier to do the entire area instead of sections.



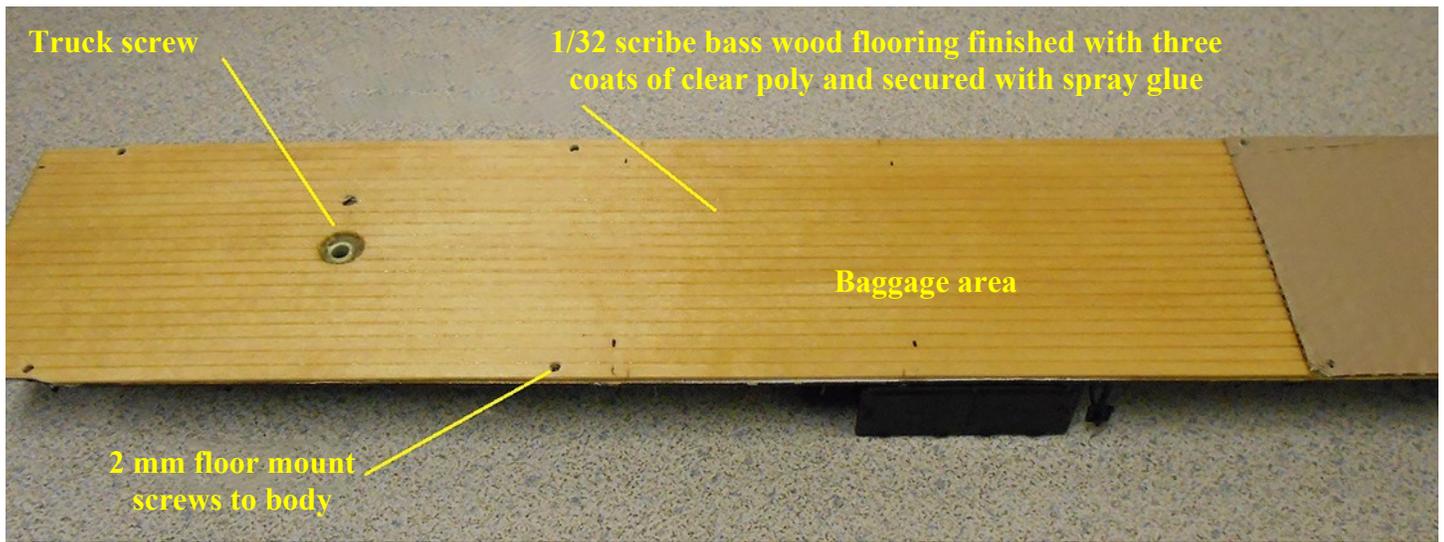


Figure 25 Baggage area flooring.

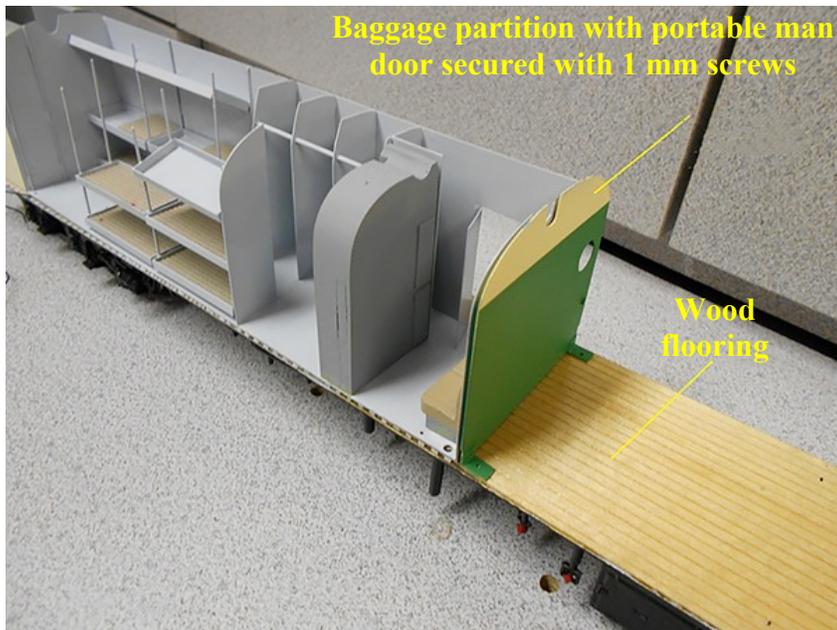


Figure 26

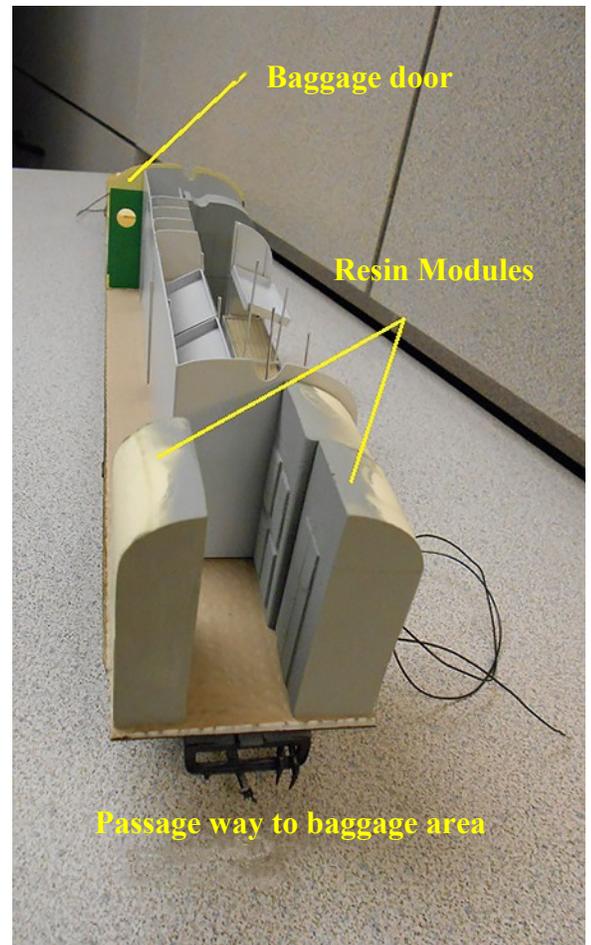


Figure 27

This completes the exterior painting and interior parts, and is pretty much standard with all my cars done over the last 3-5 years. I have refined the process so materials and concepts are set, but changes are due to happen.

## Lighting with Miniature LED's

<http://www.engineering.com/index.htm>

Before I get into the lighting work, I want to make a comment. This is my opinion. I have been using these products for many years, and as far as I am concerned they are the holy grail for LED lighting. They work – do not burn out – and are easy to install. I have had countless disagreements with people who instead of doing the research on this website and trying the products out, would rather buy the 50 ft roll of LED's that look like “bug eyes” and call it good. I am not trying to tell you that this is all there is available, and if you like your results, then please continue to use them. The person who owns this company is name Tim Anderson, and he is more than willing to help you out. His website is a text book on using the product.

I am using these with DCC with 4 amp decoders and Pittman 40x60 motors in OMI diesels and brass 12 car trains weighing 3-5 lbs each, and have never burned any out. I have wired up 40 2x3 mm LED on one bridge rectifier just to see how far I could go. OK, my opinion is now over, so let's move on.

### Tools and materials

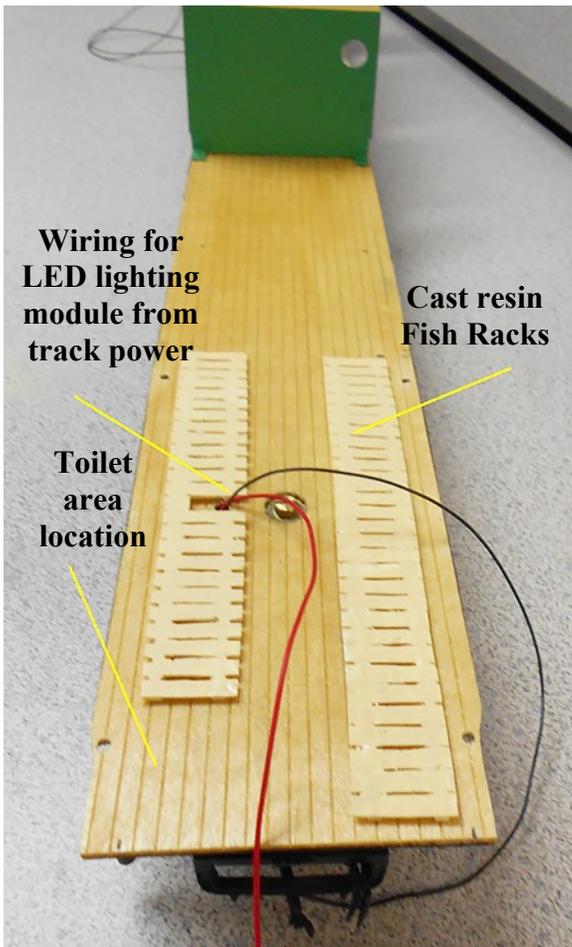


Figure 28

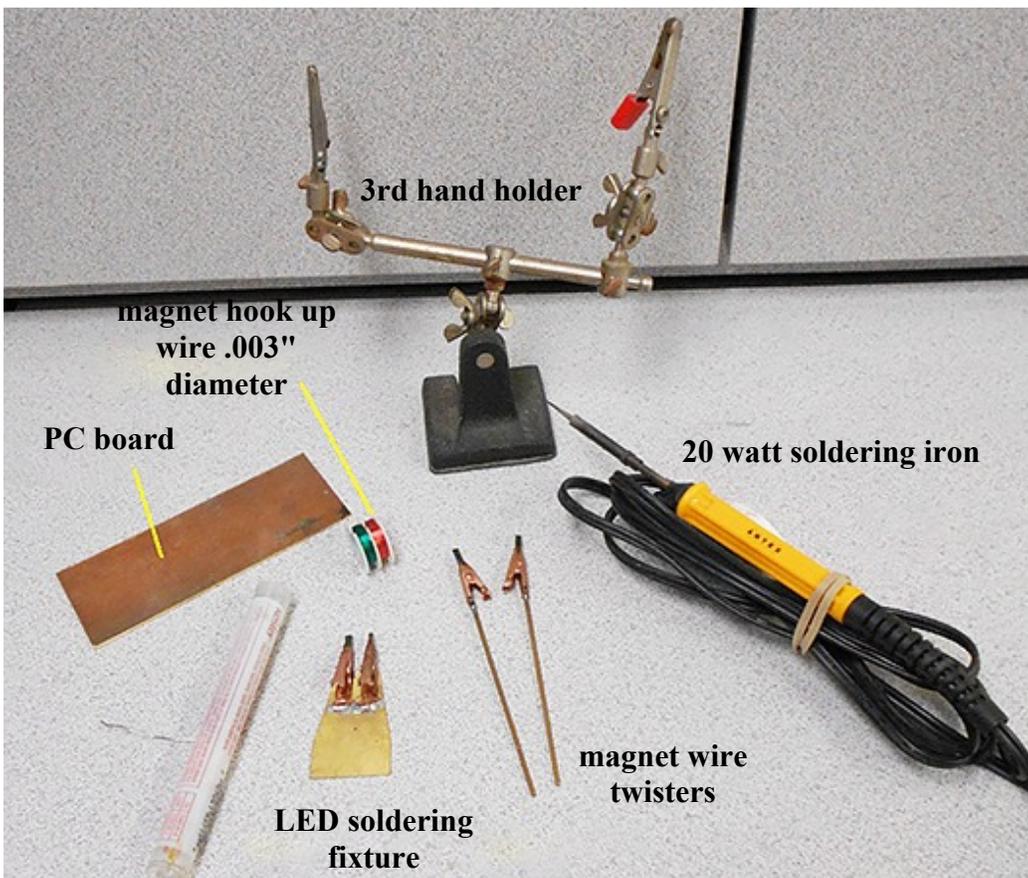
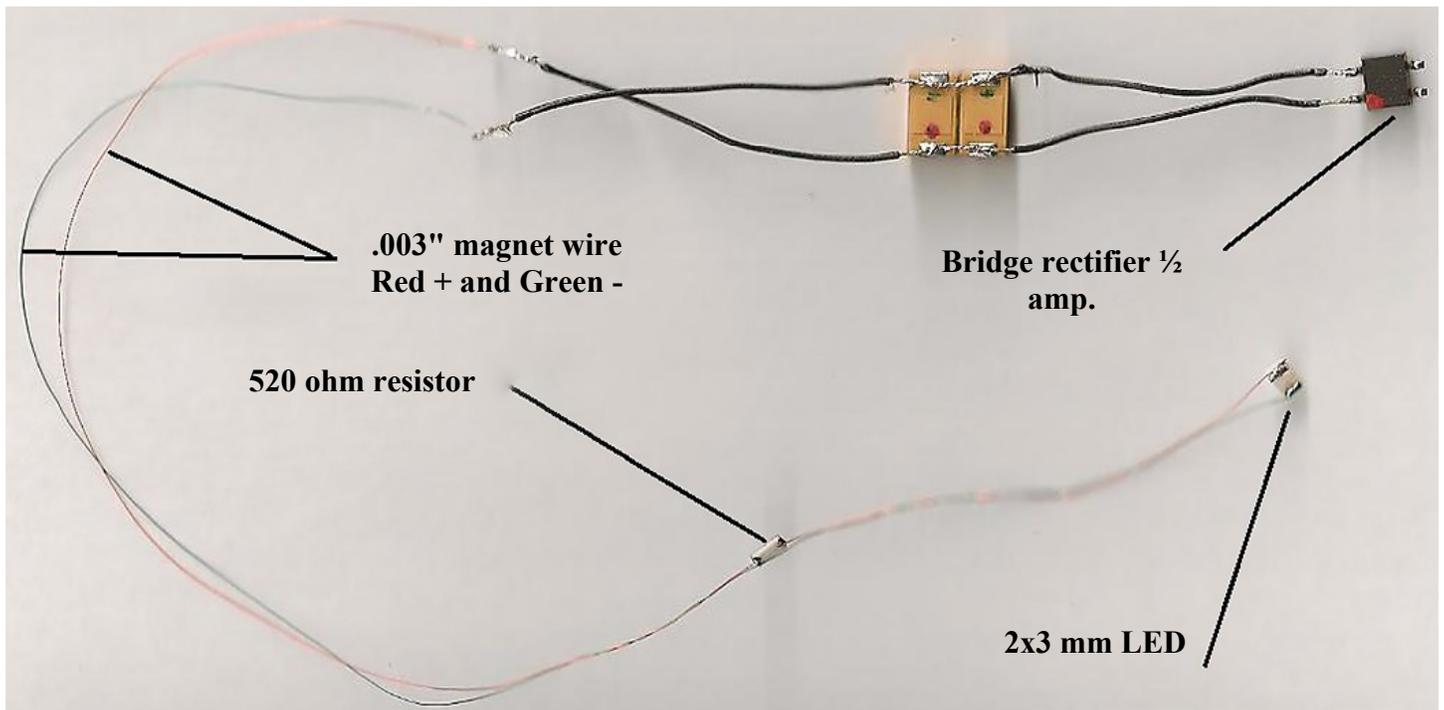


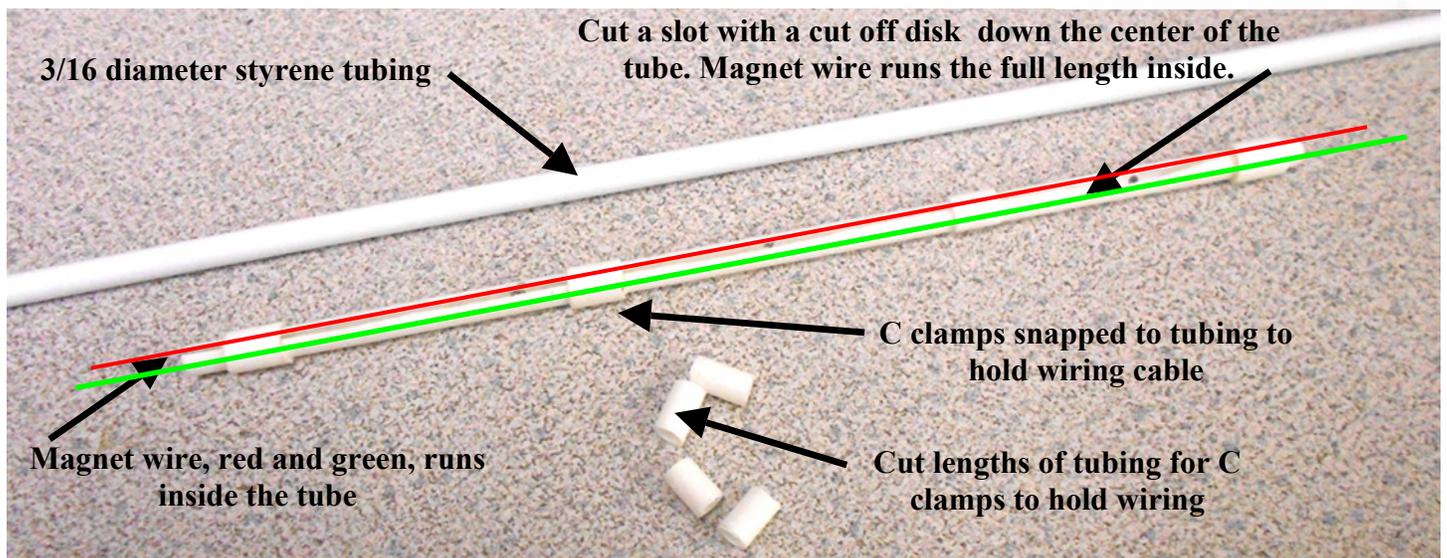
Figure 29 Left: These are the tools and fixtures I have made working with LED lighting. The type of LED you use will vary with each model in size and resistor rating. Most all I use are the 2x3 mm size. I have used the nano size, but they are a challenge to wire.





*Figure 32: Basic LED lighting module using One LED.*

*You want to make up all you will need at the same time as it is easier doing it this way. I cut the magnet wire the full length of the car and trim as needed. If you are using DCC, you do not need the brown caps as shown. Do all your cathode wires green, and all the all the anode wires red.*



*Figure 33 LED lighting wiring duct with C clips.*

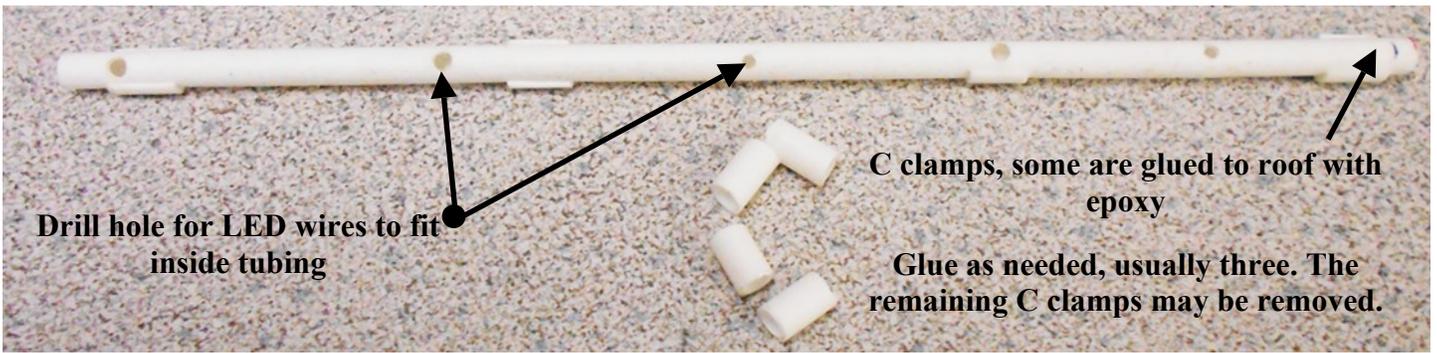


Figure 34

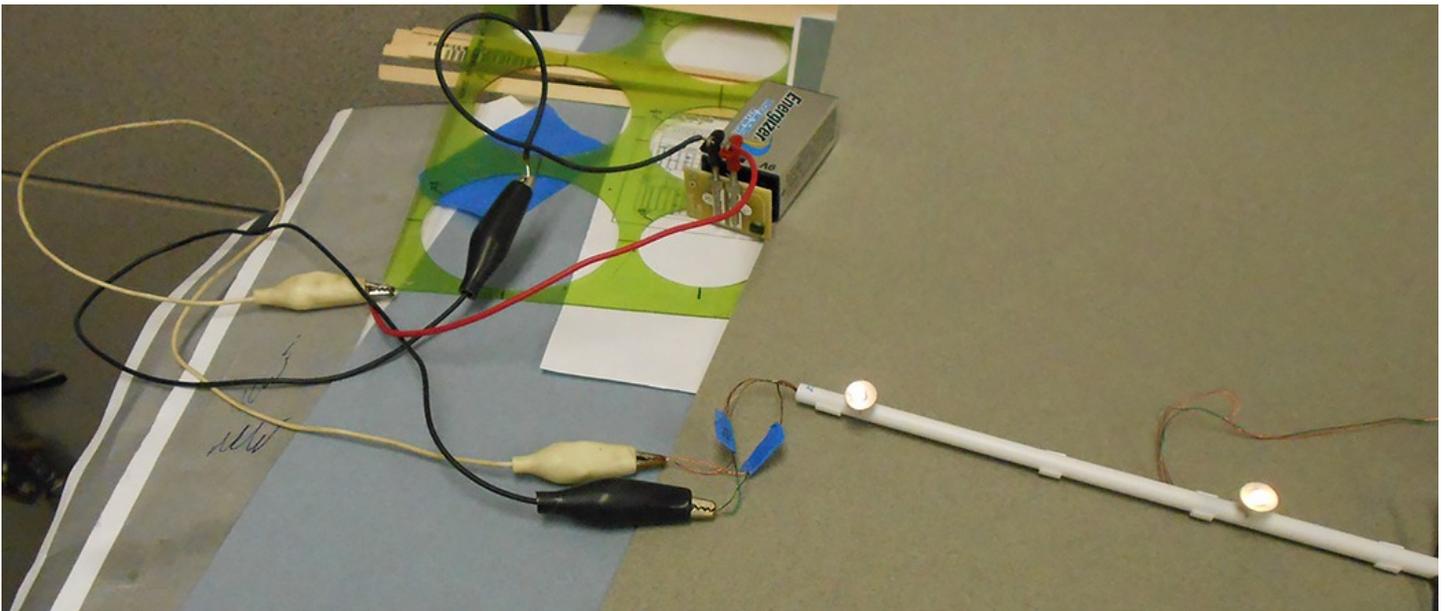


Figure 35: LED cables being tested with a 9 volt battery. These have been zoned off for use with a SPDT switch.



Figure 36: LED's passed the test and are now ready to add to the model.

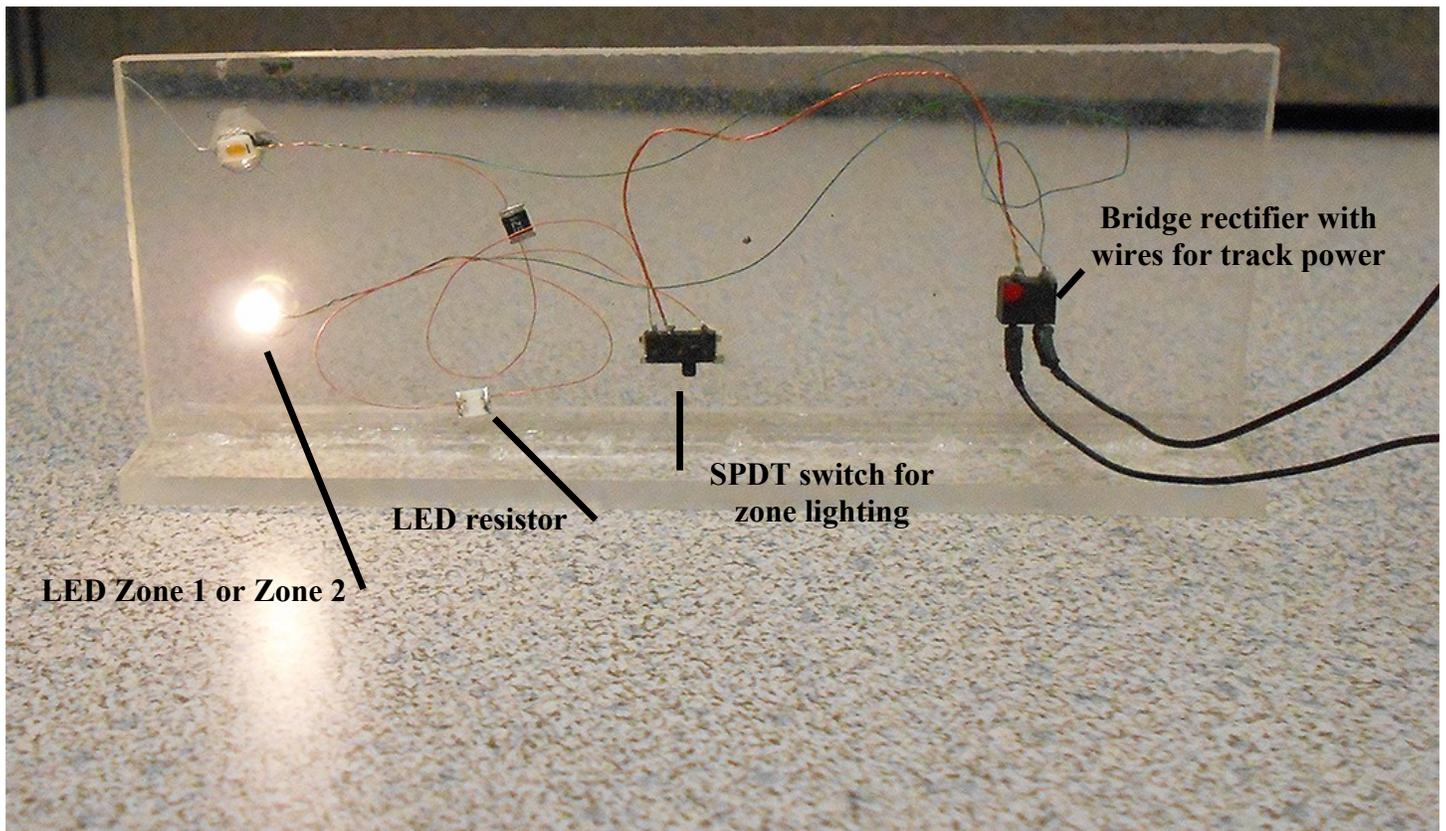
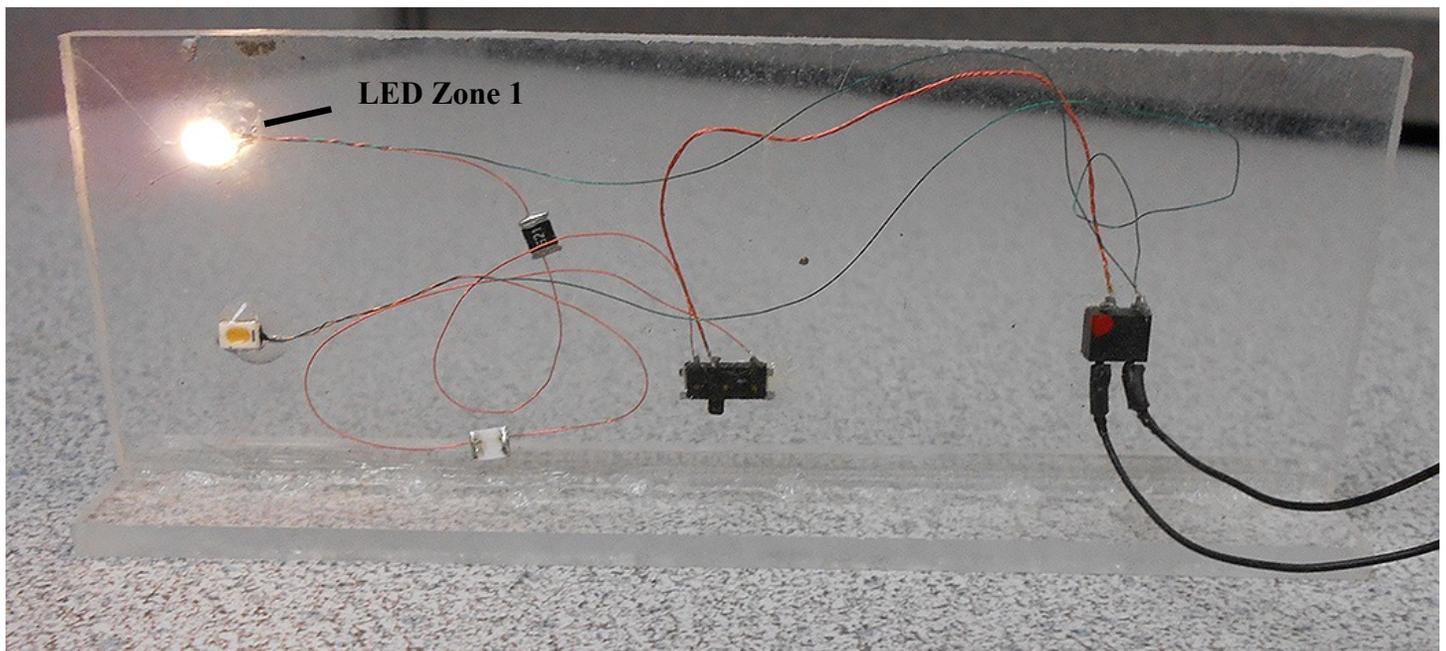
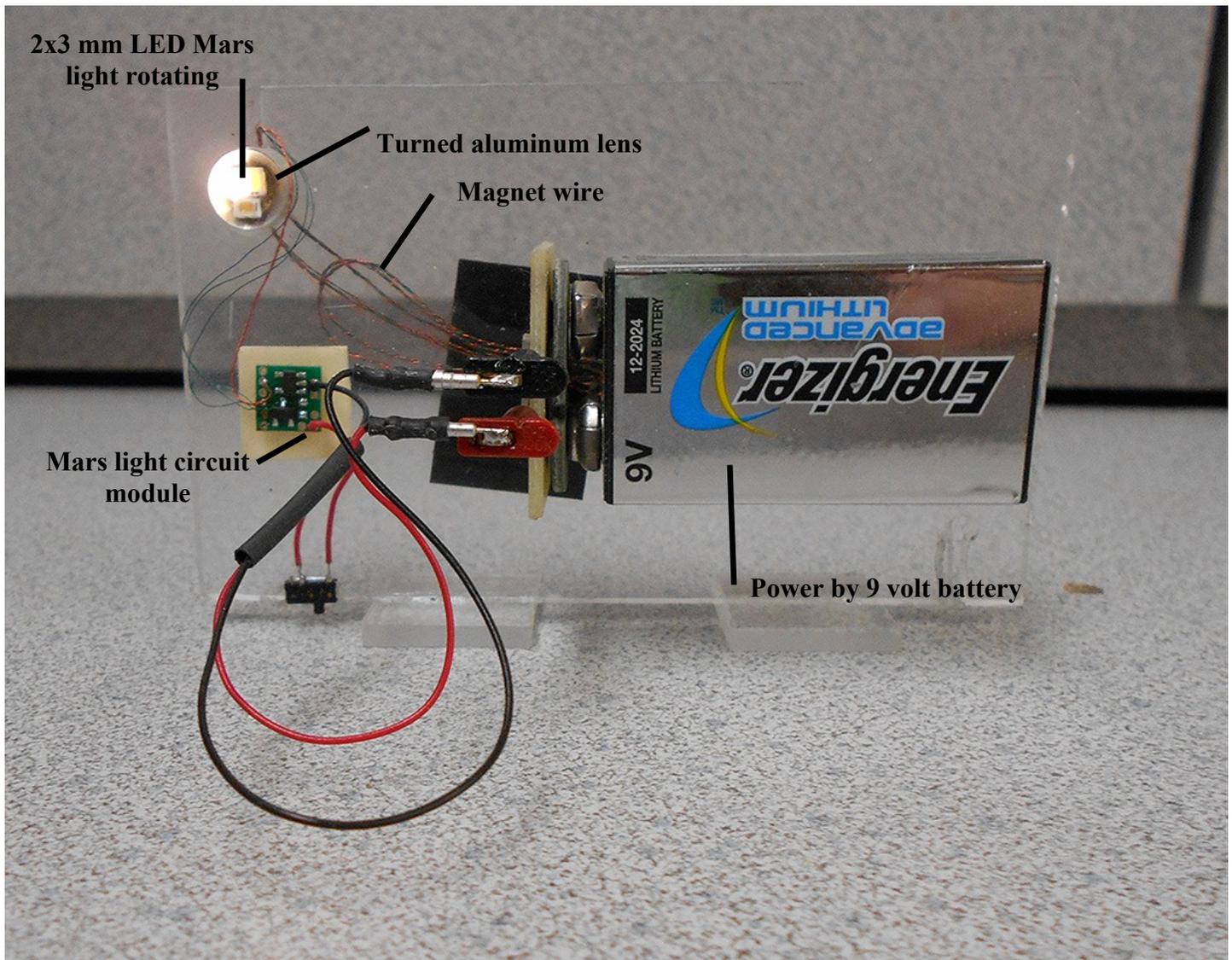


Figure 37, 38 and 39: LED wiring mock up. I use these as a visual aid so I remember how to wire them up for the various zones. I was always getting it wrong.





## Summary

I would like to close the article out by just saying, the idea for doing this was to show you some of my methods used to build O scale cars that work for me along with the equipment and tools used. I hope that you learned some new methods. Early on, I said my methods may change with each new project. But remember, research is key in building accurate models, along with having the proper tools to do the job. Some people have contacted me and said thanks for showing all the tools, and they went out and purchased some of the tools I use for their workbench. The Foredom flex tool is just one, which was a big purchase by one person and he loves it! He said that he tossed his Dremel.

Also, I would like to say that all the resin cast parts used for underbody and interiors can be found on my website for purchase, and new parts are added on a regular basis. With each new project, if we need a resin part to use, we make a pattern and cast it. It is then added to the parts line. We have over 260 different items.

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

## Our Current Project

Below is a photo of the most current project we are currently working on. This a Pullman Planetarium Dome for the Missouri Pacific sub-lettered for the I & G N (International & Great Northern) # 896 delivered in 1952 for the Texas Eagle Train. There are 12 pieces that make up the dome section which is hand fabricated since there is no etching available.



### **139' Lattice Truss Bridge** ALL BRASS CONSTRUCTION & FACTORY PAINTED

– 3 Versions –

Straight Ends	(production: 20 models)
Ends Skewed Left	(production: 5 models)
Ends Skewed Right	(production: 5 models)

### AMERICAN SCALE MODELS



**Bill Davis**  
**P.O. Box 1011**  
**Oconomowoc, WI 53066**  
**(262) 560.1619 (weekdays)**  
**More pictures and information**  
**on my website:**  
**[americanscalemodels.com](http://americanscalemodels.com)**

**\$950 Each**





**WATERFRONT DETAIL**

**14' SKIFF**

We also have engine parts for your special project

See us for Boilers, Pipe fittings Winches, Motors and more. Please Check Our Website



**Kit 334**

Features one piece resin hull. Metal and wood details. Also available a pre-war outboard motor

Kit \$12.00

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



**PC Ties** and hard to find **SUPPLIES**

- Sheet Metal - Barrels
- Hand Tools - Plastics - Poles
- Blackened Cable & Chain
- Window Glass - Wood Ties
- Eye Bolts & Rings - Paint
- Straight & Coiled Wire
- Black Nylon Filament
- Nylon & Brass Screen
- NMRA Standards Gauges
- Kits, Castings & Parts

**DRY TRANSFER LETTERING**

Over 2100 Dry Transfer Lettering Sets for all Periods and Scales

Shop Online - [cloverhouse.com](http://cloverhouse.com)

Or Order Catalog #14 - \$6.00



**Clover House**

Box 215D, Veradale, WA 99037-0215

**Millhouse River Studio**  
Division of Studio Z  
 Turntables & Transfer Tables • Manual or Auto Indexing • 2 or 3 Rail

**PRODUCTS THAT ENHANCE THE REALISM OF YOUR LAYOUT**

*Superior Build Quality & Operation • Aluminum Construction • Brass Details • Precision Auto Indexing*  
 Our tables use mounting tabs for easy installation and make upgrading from other manufactures tables easy & fast

**Optional Upgrades**

- Union Specific Arch & rail
- Pennsy Bridge Upgrade  
(Control cab, Diesel, Lateral cab, PRR Electric Arch, PRR Passenger Stanchions)
- Standard Turntable Control Cab (Pencil) Upgrade to Laser Cab & LED lighting

**34" Standard Turntable Shown**

**28" Weathered Version Shown**

Bring Your layout to Life based on time  
**LTAC**  
 Layout Time Animation Control

Made in USA

[www.studiozphoto.com/millhouse.html](http://www.studiozphoto.com/millhouse.html)  
 (716) 830-5267

**Stevenson Preservation Lines**

Kits and Parts From Past Masters



**New Kit**



New York Central  
 0-6-0 Class B-11

Nickel Plate  
 0-6-0 Class B-11

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

**Very Realistic Sidewalks**  
 Over 100 scale Feet!  
 Single & Double widths  
 4 Pieces & 1 Corner

Single - \$13  
 Double - \$20

MADE IN OHIO

FORMERLY **Keil-Line** Products

**SCALE CITY**  
 DESIGNS

330/240-1419 [SCALECITYDESIGNS.COM](http://SCALECITYDESIGNS.COM)

**RIGHT-O-WAY**

'O' Scale  
**First with Accurately Scaled Rail Since 1963**  
 Jay Criswell - Owner

Rail, Turnout & Crossing Parts, Switch & Track Parts  
 Wood Ties, Track Spikes, P48, Motors & Drives

2286 Hampton Way  
 Clovis, CA 93611  
 559.297.0505

[Jay@right-o-way.us](mailto:Jay@right-o-way.us)  
<http://right-o-way.us>

# BUSINESS CAR MATILDA AND ARCH WINDOW CARS

By George Paxon

My Mountain Electric Railway is always looking for new business, as well as, trying to hang on to what little business it already has. Late trains, wobbly track, derailments, weak bridges, and random schedules makes achieving these objectives difficult. Management decided a business car, in which prospective and existing customers along the line could be wined and dined, would be just the thing to improve relations with existing customers and solicit new ones. In typical ME Ry frugal, penny pinching fashion, they searched the used car market for a candidate car which, after a splash of paint and a few rudimentary repairs and modifications, would serve the intended purpose. Having found such a car out in Illinois (one of the Illinois Traction System 51X series parlor cars), it was moved to the Celestown Shops of the ME Ry and soon became business car 215.

I build traction models and that might cause some readers of **OSR** to not venture further into this article. But, the modelling techniques below are widely applicable. Any arch window car such as an 80 foot steam road sleeper or dining car can be built using this approach: just add more windows! For narrow gaugers out there, the techniques below will allow you to build a model of one of the East Tennessee and West North Carolina's (Tweetsie's) classic arch window three foot gauge cars. Photo 1 is an example of an arch window steam road car that can be built using these technics. This photo of a beautifully restored coach in the Mid Continent Museum collection is by Jeffrey Lentz, and used with Mr. Lentz's permission. I suggest you view this article as a source of encouragement and information on building of arch window cars, and adding laser cutting to your model builder's arsenal.



*Photo 1 Picture by Jeffrey Lentz and used with permission.*

We don't see many scratch built arch window cars; probably because many modellers see them as too difficult. This is a most unfortunate situation because the arch window passenger car is as elegant and graceful as a car ever gets. Making arch windows is not a difficult task. But, it does require patience and accuracy when done by hand. The result, however, is well worth the effort.

In years gone, by I have cut arch windows by hand. To get the windows uniform, you need to make templates: metal ones. Thin sheet steel, brass or even aluminium will do. Metal cut from a flattened smooth sided can will work fine. A card template provides only mediocre results. First, when making the card template, it is difficult to sand to exact shape as sanding results in a soft mushroomed edge. Second, when used to draw and test the openings, the business edge of the card wears rapidly and can change shape resulting in distorted and multi-sized windows. If cutting arch windows by hand, it is well worth the little extra effort to make decent metal templates. You will need one template for each size of opening. Then use the templates to mark out the window opening, rough cut the opening to inside the marked line, and file and sand the to the marked line using the template to test the opening for accuracy.

But, to me, using laser cut parts for arch window cars makes sense. I would never go back to cutting such windows by hand again after having tried the laser cut technique. To draw arch windows, all you need to add to your very basic CAD skills is an elliptical arc which is no more difficult than drawing a circle. About ten minutes of tinkering with a CAD program will have you making perfect elliptical arcs. The laser approach is perfect for arch window cars. Parts are perfectly cut. The car sides can be built up in laminations or layers to achieve a high degree of prototype detail. The tedious and time consuming work associated with cutting, sanding and filing multiple arch windows is eliminated, and there is absolutely no variation in size and shape of the windows. Construction is straight forward and simple, and the parts fit exactly. The only careful work required is the planning of the car sides as the cutting is done on a computer controlled machine.

The key tasks in applying this technique to your model building are to fully understand how a prototype car side was made, and to ensure careful design of the model parts so they will fit and be easy to assemble. I have used the technique described on several cars with very pleasing results, and will share my experiences with you.

My modelling material of choice for passenger cars is sheet styrene. I cut each layer of the car sides from .5mm (0.020 inch) thick styrene. This is not Evergreen Models styrene, but styrene made for laser work. It usually has a thin paper covering on both sides that is peeled off after the cutting process is complete. This material is available from plastic suppliers in 4 x 8 foot sheets. Some suppliers will have this in smaller sheets. And, the supplier may cut the large sheet to size for you. Your laser cutter can probably obtain the material for you. If he does not routinely use this thickness and material, he may ask you to buy the sheet up front and he can hold the remainder for future work, or you can hold it and take him the material for each of your jobs.

I have experimented with other plastics, but find styrene superior due to its ease of gluing. I have also experimented with 0.010 inch thick styrene for steel car construction. The thinner material is ½ inch scale thickness in O scale, and I was interested in getting closer to actual thickness. I stopped using the 0.010 inch thick material and do not recommend it for passenger cars. I found it too fragile, particularly the window mullions, and suffered much breakage from normal, but careful handling, during the course of construction. This wasted much time and material. I will stay with the 0.020 inch thick material as it is much more rugged, while not terribly over scale.

You can also use thin plywood, such as that commonly found in laser cut kits. This is excellent material for modelling a wood car, but wood does not do a good job imitating steel because of the grain. Wood requires a lot of work to eliminate that grain when modelling steel. If using thin ply for a wood car, make sure the grain of the exposed side of the sheet runs vertical as it would on the prototype. Card is also a popular material, but I find that it does not paint as nicely as styrene; nor does it hold up well when handled. I do use card for structures since once they are completed, they are rarely touched after placing on the layout. And, when using card, ensure it is sealed or painted on all surfaces and edges to reduce swelling and shrinking with changes in humidity and temperature. This is not an issue with styrene of course.

We need to get to the first order of business which is understanding how a prototype car side was constructed. An excellent source of information for accurate car modelling is an old Car Builder's Dictionary. I

The O Scale Resource May/June 2017

have an original 1906 edition that I have cherished ever since buying it many years ago. It has outstanding drawings with considerable detail of both freight and passenger cars of the era. Details show construction methods and materials; cross sections of walls, floors, and roof; fittings and appliances; trucks; plumbing; brakes; etc. I had to part with a few hundred dollars for this volume, but it was essential to my understanding of car construction during my period of interest. Now you can purchase a single DVD from the Historical Archive ([www.TheHistoricalArchive.com](http://www.TheHistoricalArchive.com)) that contains nine complete editions from 1879 through 1916 of the Car Builders Dictionary. The quantity of valuable data for scratch building is worth a small fortune in hardback book form, and certainly a bargain at \$20. I whole heartedly recommend this DVD to any serious scratch builder of equipment of this period. Other good paper sources of detailed car construction information include John H. White Jr's The American Railroad Passenger Car and the Orange Empire Reprint Series Railway Car Construction originally by William Voss. Both these volumes are packed with car construction details as well. Study of these sources will provide the information you need to accurately model most any old passenger car.

Think twice and cut once. I find the hardest part of my approach to car construction is the thinking bit. You need to work out how many layers are required and what goes on each layer. A careful study of the prototype car window, door, and side construction will greatly assist you here. It is very difficult to accurately model something you don't understand.

I boil my passenger car sides down to basically what is shown in Figure 1. Usually the side door details are on the inside window frame layer. The outside window frame and outside car 'skin' layers are identical in the door area to give a deeper recessed look to the door. Often a prototype door had a quarter round surround. To do this, I make the doorway slightly smaller than required on the two top layers. When assembling, I glue the outside window frame layer to the outside car 'skin' layer and sand a quarter round door surround before gluing the inside window frame layer to the car side. See the photo of the ME Ry sleeping car. A bit of head scratching and thinking, and a few sips of your favourite beverage, will allow you to accurately model almost any prototype car feature.

When drawing car side layers, you must take care to ensure they accurately mesh and overlay the other layers. The easy way to do this in CAD is to select and change the color of one layer. Then drag it over the other layer. The two colors will clearly show any errors. Then click on the "undo" icon and the layer you moved will return to its original position on the screen. By accomplishing this test when completing each layer, you can be confident your laser cut layers will be perfect fits. And, once you get rolling with CAD drawings and laser cutting, you will find that many other variations to my basic car side approach are possible. Some of these I use are below.

Glazing and car interiors: If there are not going to be any interior details in your car, glazing is simply a matter of cutting clear plastic to size and gluing it to the inside of the car side, taking care not to squeeze excess glue out onto the visible "glass". This you can do after painting the outside of the car.

If you would like to have interior detail, this is easily accomplished by adding two more layers to the car side. See Figure 2. First make an inside car 'skin' layer. This often has the same window cut-outs as the outside car 'skin' layer, but the layer is shorter by the thickness of the car floor and sills. To draw this layer in CAD, you merely make a new rectangle of the appropriate size and copy the window openings from the outside car 'skin' layer and paste them in the correct place.

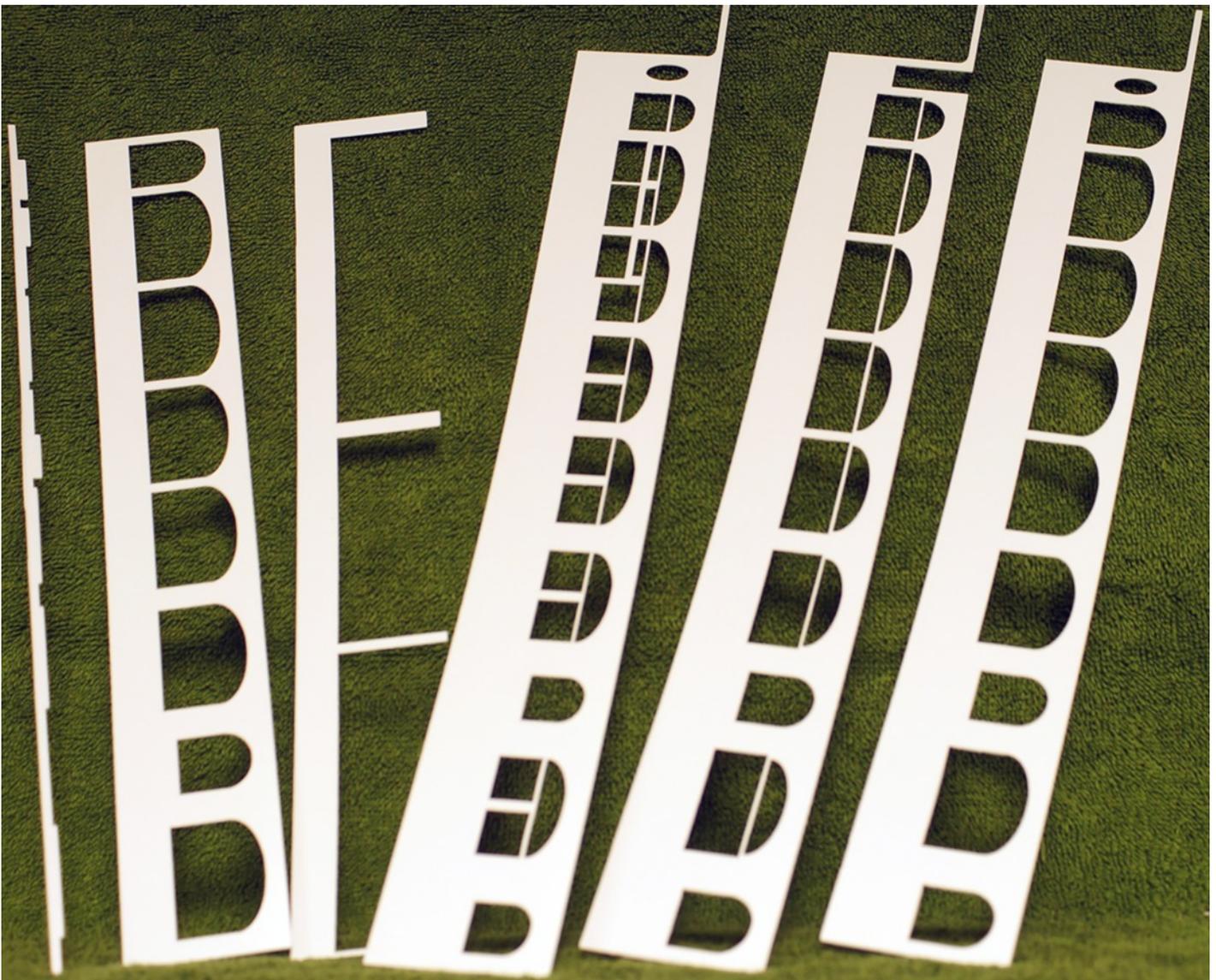
Now consider the glazing layer. I often make the glazing as several small window material units as shown in Figure 3. I also make a "packer" that includes pockets to accommodate the window material units. The "packer" can be laser cut from .020 inch thick styrene or built up from strip styrene. The vertical bars that separate the small window material units are aligned such that they are covered by window posts in the other side layers. I take this approach for several reasons. First, I can assemble all the side layers to the car floor prior to painting. I cut paper to the size of each window material unit, insert the paper into the pockets in the car sides, and paint the car inside then outside. The paper keeps overspray from each side off the other. When dry, I

remove the paper. Second, I use a thin .010 inch thick clear plastic for the small window material units, add decals for leadlight (or paint for pearl glass effects), and, when dry, insert these into the pockets. And third, having the small window material units, with the vertical bars between, provides a much stiffer and stronger car side than would be the case if a pocket the length of the car side was allowed for a full length window material insert.

Photo 2 shows the five pieces required for the side of a car with interior detail. Don't spend too much time trying to figure out how the window sill fits the car side as it is actually the window sill for the other side of the car, and some of the open windows are in different positions.

Photo 3 shows a completed car side of five layers with the paper inserted in the pockets that eventually will hold the window material units.

Photos 4 and 5 show parlor car 234 and sleeping car 236 during construction with the sides and ends in place on the floor.



*Photo 2*

By the way, pearl glass panels can be modelled by dabbing pearl acrylic colors onto the backside of the top portion of the window material units. Pearl colors are found in small tubes in most art shops. Pearl white can be used with yellow, light green or light blue to yield a nice effect.



*Photo 3*



*Above: Photo 4*

*Below: Photo 5*



Scribed siding: Most, but certainly not all, period passenger cars had narrow board siding and modelling requires scribes at a scale 2 to 3 inches. Using a laser to make scribed siding is not terribly economical, so it should be done only when it makes sense. One modification to my three layer approach applies to scribed siding. By breaking the outside car 'skin' layer into two, you can use .020 thick Evergreen scribed passenger car siding below the belt rail and scribe only around the arch windows above the belt rail. Be sure your scribe

spacing above the belt rail is the same as the Evergreen scribing below the belt rail. Also, the scribe lines above and below the belt rail should align.

If your car does not have a continuous window sill/belt rail, you are stuffed and may need to scribe the entire outside car 'skin' layer. This was the case for me with my sleeping car 236 in the photos, as the belt rail and window sill were only under the windows.

I suggest you scribe all the way from top to bottom of the layer rather than providing the scribe lines only where they will be seen. On one car, I did not scribe the area under the letter board and I had some distortion to the partially scribed layer.

Other detail layers/rivet strips: As mentioned above, not all passenger cars had scribed siding. Some had a panel-like appearance from a very wide board siding with narrow battens. Very common with traction cars was a sheet steel sheathing over the siding. This steel sheet was added to make the car appear to be made of steel, while it actually had a wood framed sides. Usually, where the sheets joined, there were vertical rivets. A narrow vertical rivet strip was often seen with two vertical rows of rivets securing the adjoining steel sheets together. This was the case with the prototype for my business car Matilda, and it was modelled accordingly.

Some cars had decorative woodwork around the windows and doors, and appeared as an additional layer over top the scribed siding. The prototype for my ME Ry parlor car 234 was an Illinois Traction System car identified variously over time as the Champaign, Sangamon, and lastly number 234; and it had this woodwork overlay which I modelled as you can see in the photo. This was made using a fourth car side layer that was placed over the scribed outside car 'skin' layer and under the letter board. When planning your car, allow for the extra width of this fourth layer and deduct it from the floor width and your car will be the appropriate overall width.

Other cars had a wooden beading that was part of the window framing and extended outward further than the scribed siding. This was the case with the prototype for the ME Ry sleeping car 236. You can see it is also present in the photo of the Great Northern coach. To model this, I used some .010 thick Evergreen strip. The window opening was identical in both the outside car 'skin' and outside window frame layers to provide a .040 thick ledge to which the .010 styrene strip was glued. The trick here is to cut the styrene strip to exactly the right length so that it fits perfectly into the window opening. If the strip is too long, it will bulge out in places when you try to insert it. If the strip is too short, it will not sit tightly in the corners where the straight window sides transition to the sharp curve of the elliptical arch. Start by cutting the strip to a length that is too long. Then cut tiny bits from the strip and test fit in a window opening. When the strip is the correct length, it will snap into place perfectly. Keep cutting tiny bits from the end of the strip until it does snap into place and fully and tightly fills the opening. When you have the first window done, cut all other strip to exactly the same length. Since the laser cut window are all identical, the other strips will also fit perfectly. If you have cut your window openings by hand, it will be necessary to make each strip separately to get a perfect fit. Again, you can see one of the benefits of using laser cutting.

Some cars had a beading along the edges of the letter board. I have modelled this using .020 x .020 styrene strip. This is seriously fiddly work, particularly when it must be curved, but the effect is very good. I curve the .020 x .020 styrene strip using a suitably sized tapered paint brush handle. Start with the largest end of the paint brush and work your way down to the smaller end. If you try to curve the styrene too tightly at first, it will often break. Work it to a curve slightly tighter than is required as it will spring back a little while you are gluing it in place. Hold it while the glue dries, which will only be a minute or less. You can see what the finished beading looks like in the sleeping car 236 photo.

Open windows: Before air conditioning, it was essential to open car windows in warm weather. The nice thing about traction cars was you did not get a face full of cinders from an open window. A very nice, but rarely modelled feature is open windows. This is a much simpler task when using laser cut parts. Windows usually

opened about half way. Draw a bottom rail approximately half way up the window opening. Widen the window opening on the inside window frame layer between the window sill and the new bottom window rail. Above the new bottom rail, the window width is as before. If you have an open window, the window opening can extend to the bottom side of the window sill to allow the window sill to pass into the opening. This will become clear in the photo below.

Letting in window sills: A nice feature made easy by laser cutting is to let in the window sills. By this, I mean letting the window sill extend into the window openings between the posts on the sides of the windows. On prototype cars, the window sills extended all the way through the window opening to form a small sill on the inside of the car. There was a small step-up in the sill just inside the bottom sash to prevent rain from blowing into the car under the window. Modelling the step-up is not necessary, but having the window sill extend into the opening is nice. Without this feature, the top edges of the outside car 'skin' and outside window frame layer are visible and distract from the otherwise clean lines. I make the bottom of window openings 0.20 inches lower to allow for the window sill. To add this feature, instead of using a strip of Evergreen styrene for the window sill, laser cut the window sill with tongues that extend into each window opening. To make these thin and delicate parts easier to handle during construction, I usually make my window sills wider than is required, and sand the extra material down once the window sill is firmly glued in place. See Figure 4 for details. And, the window sill can also be made in several shorter pieces to make it easier to handle.

Parts other than car sides are also drawn and laser cut to make model construction easier and more accurate.

Car ends are made in layers in a similar fashion to the sides. I make a former to go at the top and bottom of the ends, and make each layer for the ends in three pieces. A center section has the door (or center window for traction), and the sides sections can be blank steel panels or have side windows as required by your prototype. Window sills, scribing, etc., are provided when required. The center and side panels are glued to the



*Photo 6*

former, and the completed ends installed between the sides. See Photo 6 of the ends in work and prior to installation. Note that the center and side panels are flat. I assume this was usually, but not always, the case to accommodate flat glass in windows. In the photo of the end, you will see packers at the top that are curved by sanding. They will be covered by the letter board, or facia, which extends around the ends of this car.

Often, car corners were made from a quarter round material. In this case, the ends are not between the sides, but between lengths of Evergreen quarter round strips which have been sanded down (from a full quarter round to approximately 60 degrees so they align with the angle of the ends) and then glued to the ends of the car sides. You can see this quarter round on the sleeping car 236 and parlor car 234 photos. The corners were actually built up as shown in the sketch at Figure 5. Again, when designing your car, you need to take the addition of the quarter round into account when determining how long the completed car sides will be. To repeat: all the hard work with this technique is in planning your car.

For a railroad roof car, a car with a clerestory, the small windows in the clerestory usually line up with the windows on the car sides. Making these by hand requires more than the patience of Job – particularly if they are arched. But, it is dead easy with laser cut parts. I use the very nicely made open roof stock from LaBelle for railroad roof cars. I cut down the roof stock, sometimes both width and length, and size it for my model. Then, I draw the clerestory sides with several layers much as is done for the car sides. I use some Evergreen strips for the posts between windows when these are needed. See the photo of ME Ry car 234.

Using these simple methods, you can make very realistic and highly detailed models of the graceful arch window cars that were once seen on most all traction and steam roads. After full arch windows went out of vogue, some steel traction and steam road cars were built with a gentle curved window top. The technique works well for these cars also. Photo 7 shows a steel Pittsburgh Railways Co 3700 car under construction with the sides made using the same approach. The Pittsburgh car has been primed and rivets added using decal rivets.



*Photo 7*

Give this technique a try...you'll like it. The following four photos show some of the finished cars I have built using this technique. The ME Ry will be entertaining in business car Matilda soon!





**Editor's Note:** You may print the drawings on the following pages by using the upper menu, selecting the printer icon and then selecting the page(s) you wish to print.

# FIGURE 1 MODEL CAR SIDE CONSTRUCTION

14 AUG VER

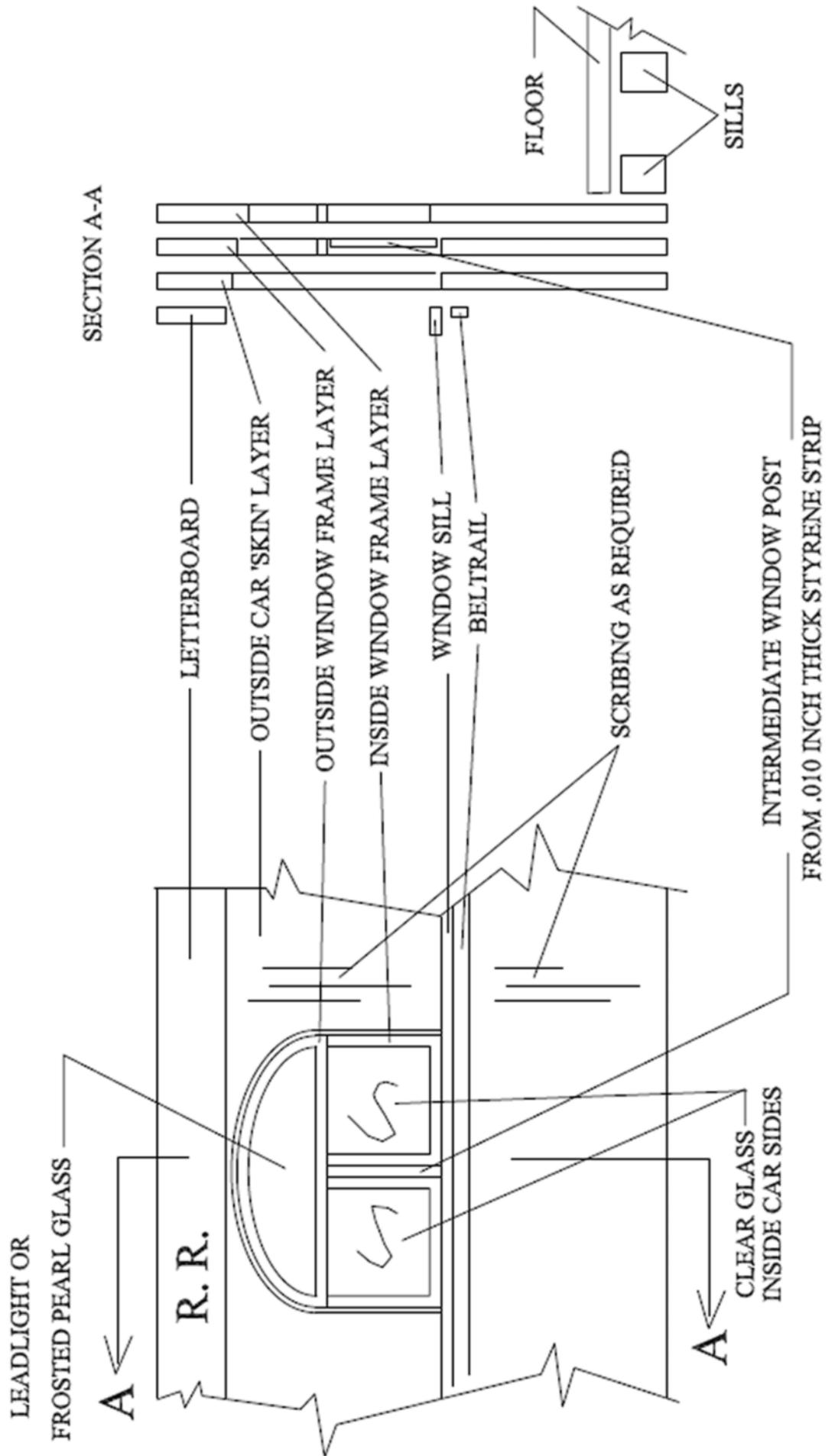


FIGURE 2

EXTRA LAYERS FOR INTERIOR DETAIL

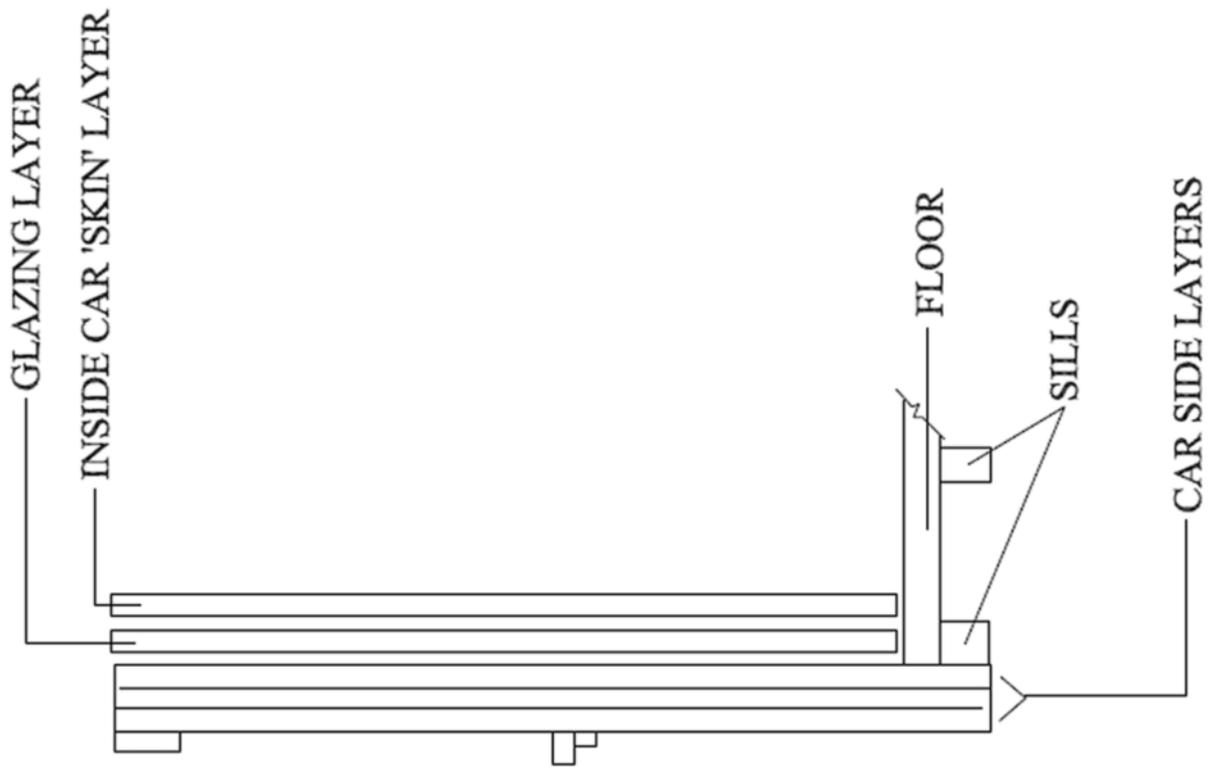


FIGURE 3  
GLAZING LAYER

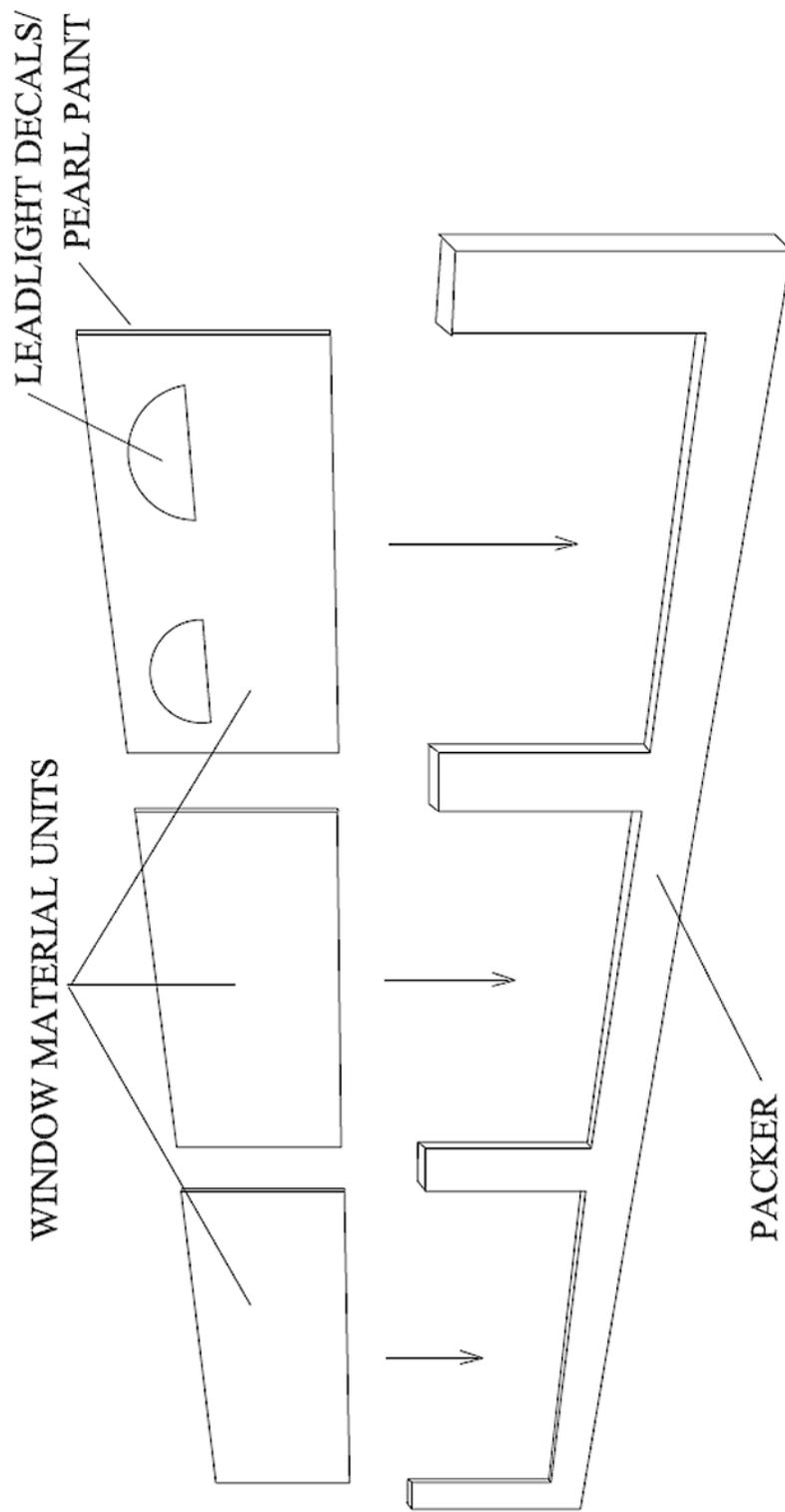
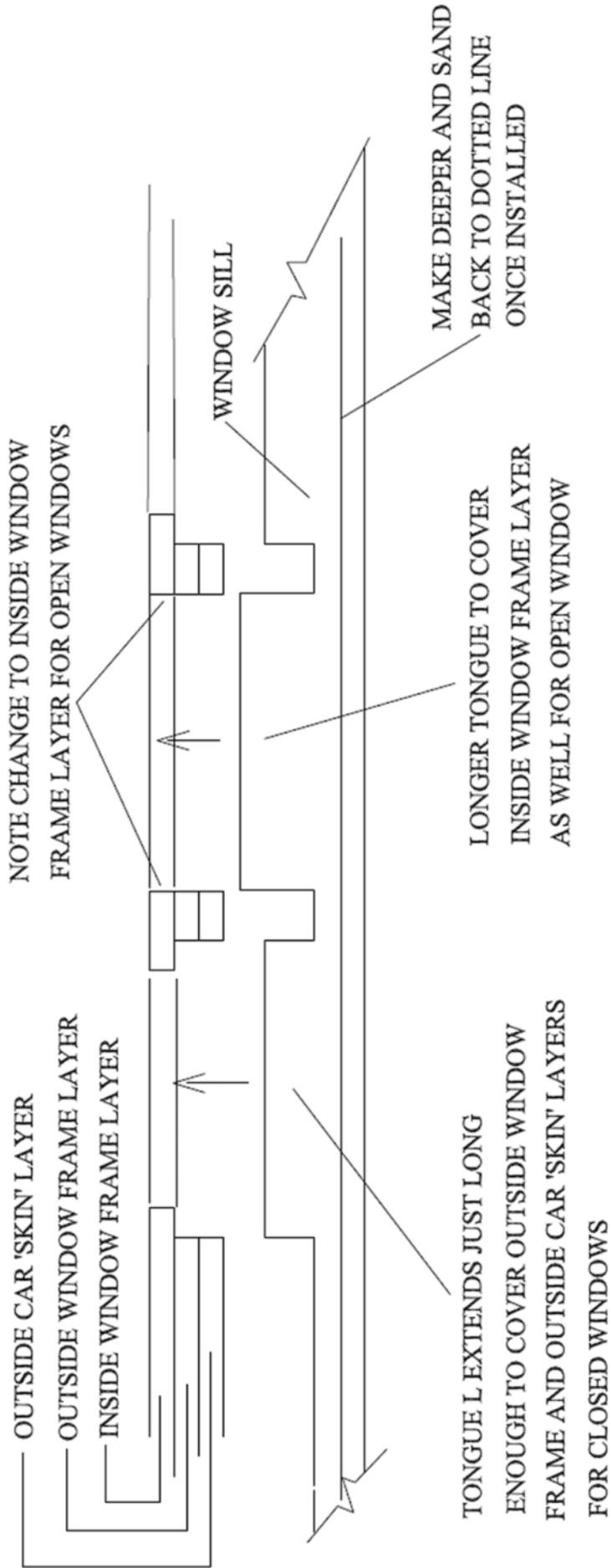
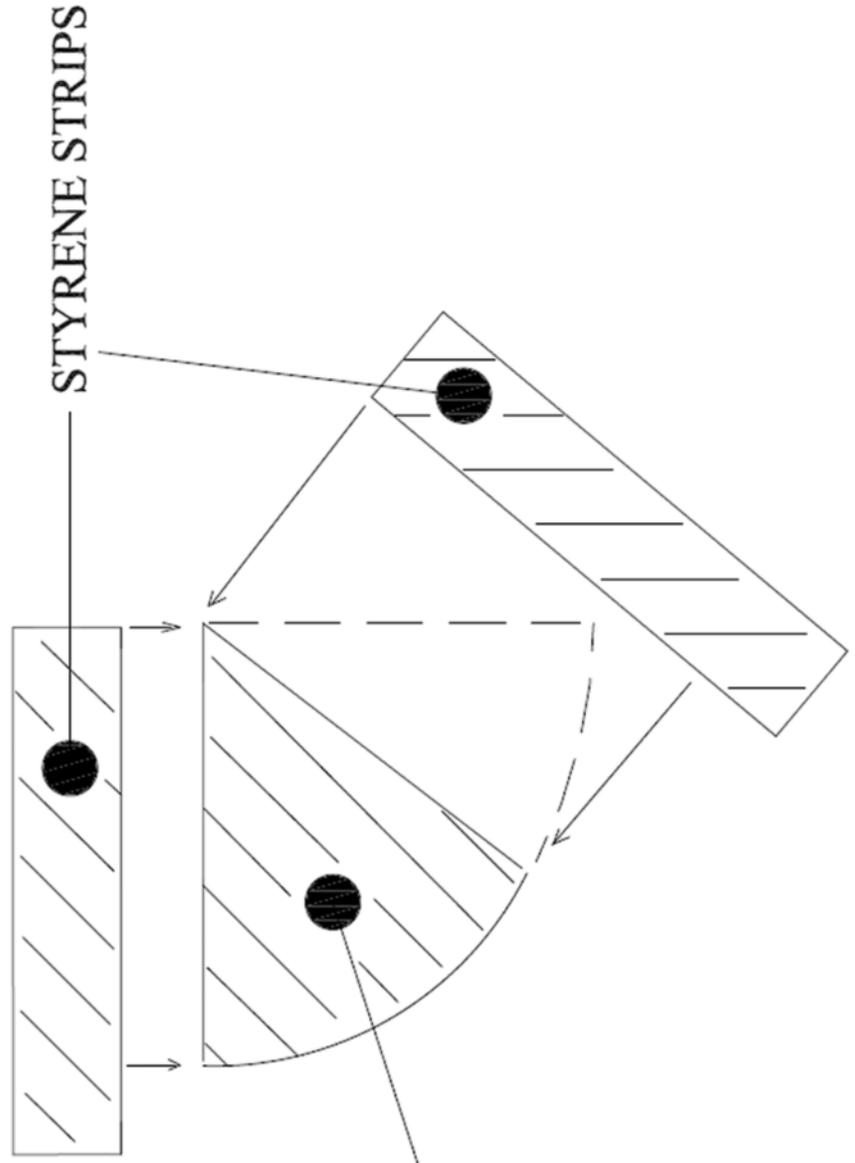


FIGURE 4  
WINDOW SILL DETAIL



# FIGURE 5 CAR CORNER DETAIL



STYRENE QUARTER ROUND  
SANDED TO MATCH ANGLE  
BETWEEN SIDE AND END

# Oddity

*n. 1. One that is odd. 2. The state or quality of being odd; strangeness.*

By Daniel Dawdy

Many people take photos of engines and even cars, but most stop at that. I, on the other hand, just love to shoot things that I may want to model in the future. I love to model details and have people say, "Must have made that up... never seen a real railroad do that.". That's when I whip out the picture to show them that indeed the real railroad did.

**Caution: This tactic does not make many friends :-)**



*Parts and pieces of GP9 No. 1601 loaded on flat cars in North Bay, ONT. on December 29, 1993. This unit has since been rebuilt, and is back in service.*



# WHAT'S ON YOUR WORKBENCH TODAY?

This series shows our readers what other modelers are working on, and we need your help to make it successful. All that's needed is a simple snapshot of what your workbench looks like and the project on it. Send us a picture or two along with a short description of what you are working on so we can share it here. If it's a project under construction, send it in. Repair job, send it in. Completed project, send it in. Send your pictures and descriptions to [daniel@modelrailroadresource.com](mailto:daniel@modelrailroadresource.com)

Andreas Mehrl sent us some pictures of a building under construction, and says "Work is going on slowly. I made some windows, installed the doors and inside lights. Have a view inside the engine house. The roof, which I didn't photograph, is made like a real roof and is not made from boards."





# SCENE AROUND THE LAYOUT



*Boomer engineer Nelson Cain snaps a few shots of his engines before taking control to depart Moss Lake on Extra 9783 West.*

Featured Layout: Brady McGuire's PRR Laurel Valley Secondary, circa 1957. Southwestern Pennsylvania, Pittsburgh to Connellsville. Moss Lake is his east end 8 track staging yard.

Photo by Nelson Cain  
(With Photoshop enhancements by Daniel Dawdy)

We are proud to feature reader's work. Depending on your response, we would like to make this regular feature. So get those cameras and cell phones out and start shooting!

High quality JPG or TIF files only.

Email to [scene@oscaleresource.com](mailto:scene@oscaleresource.com) with a description of your picture.

# O SCALE SHOWS & MEETS

**Have an upcoming O Scale event? We would like to help publicize it. Send us the information up to one year in advance, and we'll place it here along with a direct link to your Website and/or Email.**

**[Click here to send us your information.](#)**

## 23rd National Model Trolley Meet

May 19-20, 2017

Allentown Fairgrounds, Agri-Plex Charles Hall

17th & Chew Streets, Allentown, PA 18104

Sponsor: East Penn Traction Club

Largest trolley modeling event in North America viewing models, large layouts in O, HO and other scales. Meet theme: Deck Roof Trolleys.

Meet registration \$23 in advance

\$25 after May 1st.

to our web site for registration information, forms, and you can choose to register online

Website: [eastpenn.org/meet2017.html](http://eastpenn.org/meet2017.html)

Email: [treasurer@eastpenn.org](mailto:treasurer@eastpenn.org)

## 2017 O Scale West / S West 12

May 25-27, 2017

The Hyatt Regency Santa Clara (San Francisco area).

Family registration for the entire meet is \$35.

This includes you, your spouse/SO, and all children under 18, related or not. |Un-registered attendees can walk up on Saturday and get in for \$25.

<http://www.oscalewest.com/>

## "Yankee Clipper", The 49th O Scale National Convention!

June 22 through 25, 2017

Holiday Inn, 1 Brightmeadow Boulevard

Enfield CT New England USA 06082

O Scale National Convention. Dealers, Clinics, and Model Contests. Tours include the Essex Steam Train, Pioneer Valley Live Steamers, Home and Club Layouts.

Email: [godfreys78@aol.com](mailto:godfreys78@aol.com)

Website: [snemrr.org/index.html](http://snemrr.org/index.html)

## 2017 St. Louis Railroad Prototype Modeler's Meet

Friday, June 23rd and Saturday, June 24th, 2017

Gateway Convention Center, One Gateway Drive

Collinsville, IL 62234

Connect with friends and fellow prototype modelers at the nation's largest Prototype Modeler's Meet. Over 480 attendees in 2016! 23,000-sq.ft. of high-quality models, displays, visiting prototype layouts, hands-on workstations and more in the modern, professional Gateway Convention Center.

Website: <http://icg.home.mindspring.com/rpm/stlrpm.htm>



## Strasburg Train Show

August 12 and October 14, 2017

2-rail swap meet at the Strasburg Fire Co, 203 W. Franklin St, 9 AM - 1 PM. Admission \$5 (Wives/children/military w/ID free).

Tables are \$25 for first table, additional tables \$20 each. Great food, modular layout, clinics. Contact John Dunn 609.432.2871

or [jdunn8888@hotmail.com](mailto:jdunn8888@hotmail.com) or Rich Yoder at

[oscale48@comcast.net](http://oscale48@comcast.net).

## Indianapolis O Scale Show / S Scale Midwest Show

September 21-23

Wyndham Indianapolis West

The Indianapolis O Scale Show has been in place for over 48 years.

For the past 15 years, it has been chaired by James Canter, and he

has decided it is time to "pass the torch" We, at The Model Railroad Resource LLC, publishers of The O Scale Resource and

The S Scale Resource, are proud to have been selected to carry on

the tradition for the 49th year.

Website: [indyoscaleshow.com](http://indyoscaleshow.com)

Email: [info@indyoscaleshow.com](mailto:info@indyoscaleshow.com)

## Cleveland 2-Rail O Scale Meet

November 4<sup>th</sup>, 2017

Lakeland Community College, Auxilliary Gym

7700 Clocktower Drive Kirtland, OH 44094

Model Train Meet buy, sell trade

9 am to 2 pm Adm. \$7.00

email [jl464@yahoo.com](mailto:jl464@yahoo.com) phone 440-248-3055 for more nformation

Website: [www.cleveshows.com](http://www.cleveshows.com)

## O Scale South 2018

January 13-14, 2018

The 4th Annual Atlanta O Scale 2 Rail Meet, will be held from 9 AM to 1 PM on Saturday January 13, 2018 at the Church of Life

Lutheran Church in Roswell, Georgia. Layout tours will be available on the afternoon of January 13 and on Sunday, January

14, 2018.

Website: [www.oscalesouth.com/](http://www.oscalesouth.com/)

Email: [oscalesouth@gmail.com](mailto:oscalesouth@gmail.com)

## Chicago March Meet

March, 16, 17 and 18, 2018

Weston Lombard Hotel

Lombard, Illinois

Email : [info@marchmeet.net](mailto:info@marchmeet.net)

Web Address: [marchmeet.net](http://marchmeet.net)

# INDIANAPOLIS O SCALE SHOW



## S SCALE MIDWEST SHOW

COME TO INDY AND KICK OFF YOUR MODELING SEASON!

THE BEST OF O SCALE AND S SCALE IN ONE SHOW

# SEPTEMBER 21-23, 2017

WYNDHAM INDIANAPOLIS WEST 2544 EXECUTIVE DR. INDIANAPOLIS, IN 46241



ROOM RATE \$105.00\*  
PER NIGHT  
UNTIL 8/20/17  
\*BASED ON AVAILABILITY

317-248-2481  
877-361-4511

**DEALER SETUP**  
THURSDAY 4PM - 7PM  
FRIDAY 8AM - 9AM  
  
\*\*\* SHOW TIMES \*\*\*  
FRIDAY 9AM - 5PM  
COMPLIMENTARY HORS D'OEUVRES  
AND CASH BAR 5PM - 6:30PM  
SATURDAY 9AM - 2PM

BUY/SELL/TRADE  
MODELING CLINICS  
MODULAR LAYOUTS  
LAYOUT TOURS

### MEET OLD FRIENDS AND MAKE NEW ONES

Please print clearly – Detach and return lower portion with payment

Name: \_\_\_\_\_  
(Exactly as you would like badge printed)

Business: \_\_\_\_\_  
(Exactly as you would like badge printed - table holders only)

MAILING ADDRESS

CITY/STATE/ZIP

Phone: (\_\_\_\_) \_\_\_\_\_

Email: \_\_\_\_\_

Make checks payable to: Model Railroad Resource LLC  
Mail registration form to: 407 East Chippewa St  
Dwight, IL 60420

Or register and pay online at:

Registration (Both days included) \$25.00 \$25.00  
(Table holders must pay the \$25.00 registration fee)

# Of 6 ft. Tables \_\_\_\_ \$50.00 ea/\$60 after 8/1/17 \$ \_\_\_\_

O Scale vendor  S Scale vendor  No preference

Number of add'l registrants \_\_\_\_ @ \$25 each \$ \_\_\_\_  
(Please list below/Use back if needed/Children 15 and under free)

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Spouse's Name: \_\_\_\_\_  
(No charge/only needed if attending show)

TOTAL AMOUNT ENCLOSED: \$ \_\_\_\_  
(No refunds after 8/1/17)

Electrical needed? Yes   
(Subject to availability)

## INDYOSCALESHOW.COM OR SSCALEMIDWEST.COM

CONTACT INFO@INDYOSCALESHOW.COM OR CALL 815-584-1577 WITH ANY QUESTIONS

The parties, whose names appear on this registration form, have agreed to hold harmless all of the organizers, sponsors, Model Railroad Resource, LLC, The Wyndham Indianapolis West, and others, single and collectively, for any injury, harm, loss, damage, misadventure, or other inconvenience suffered or sustained as a result of participating in the Indianapolis O Scale Show and S Scale Midwest Show 2017, or in connection with any activity related to this event, whether of negligence by agents under their employ or otherwise.

## MANUFACTURERS

**O SCALE TURNOUTS™, INC.**  
"Ready to Lay on your Right of Way™"  
info@oscaleturnouts.com  
810.231.4461



O-scale, 2-rail, precision engineered, high quality, prototypical looking turnouts.  
**Made in America**

"the people people"  
**Fun & Games**  
unparalleled craftsmanship

Phone: 573-619-8532  
Email: orders@scalefigures.com  
Web: scalefigures.com

**PRE-SIZE MODEL SPECIALTIES** **Free Shipping**  
See our web site for details

Cast resin items for your S & Sn layout.  
Tunnel portals, bridge piers, abutments, culverts, and retaining walls.  
Trackside details and sage brush tree armatures.

**OVER 1000 DETAILS A MUST SEE!**  
**WWW.MODELTECHSTUDIOS.COM**

**NICKEL PLATE MODELS**  
OF MARYLAND

13732 Lakeside Dr. Clarksville, MD 21029  
Phone: 301-854-3200 Email: NKP48@aol.com

**BOATS** 

**hulls & fittings for your layout or diorama**  
**www.seaportmodelworks.com**  
603-498-3849 sales@seaportmodelworks.com

## PRE OWNED

**Jim Hackworth** 2631 Edgevale Rd  
Columbus, OH 3221-1113  
**MODEL TRAINS** PH : 614-451-3428

jhmtrains@columbus.rr.com  
Web : www.jhmtrains.com

## SHOWS & MEETS

**Chicago "O" Scale Meet**  
**MARCH 16-18 2018**  
**www.marchmeet.net**  
Ph. 630-745-7600

## DEALERS

**Caboose Stop Hobbies**  
301 Main St.  
Cedar Falls, IA 50613  
Phone: 319-277-1754  
trainguy34@mchsi.com  
Web: www.caboosestophobbies.com



**RIO GRANDE SOUTHERN RAILROAD HOBBIES** RGSRR Hobbies  
1102 Dyer Rd  
Whitewater, CO 81527  
PH 970-245-5100  
**www.rgsrrhobbies.com**

## PROTO 48

**AMERICAN SWITCH & SIGNAL**  
13052 Rattliff Run, Fishers, IN 46037-6266

Phone: 317-774-5755  
Email: jfpautz@comcast.net

**PROTOCRAFT™**

18498 Half Moon Street, Unit 203  
Sonoma, CA 95476-4835  
Phone: 707-935-7011  
Email: norm@protocraft.com  
Web: www.protocraft48.com

## Advertisers Index

Allegheny Scale Models	Pg 26	Millhouse River Studio	Pg 72
Altoona Model Works	Pg 11	O Scale Hauler	Pg 11
American Scale Models	Pg 71	O Scale Kings	Pg 12
B.T.S.	Pg 45	O Scale National	Pg 2
Berkshire Car Shop	Pg 12	O Scale West	Pg 2
Centenary of WW1 US railway cars in Europe	Pg 11	P&D Hobbies	Pg 11
Clover House	Pg 72	Protocraft	Pg 12
Crow River Products	Pg 72	Rich Yoder Models	Pg 12
Des Plaines Hobbies	Pg 26	Right-O-Way	Pg 72
Delta Models	Pg 12	RailFonts.com	Pg 26
Indy O and S Scale Show	Pg 92	Scale City	Pg 72
JV Models	Pg 26	Stevenson Preservation Lines	Pg 72
Korber Models	Pg 12	Streamlined Backshop	Pg 11
		Sunset / 3rd Rail	Pg 4



508

508

508

SANTA FE