

NEWS, REVIEWS, INFORMATION TO USE Volume 5 No. 3 January/February 2018

SCALE

THE

Converting Narrow Gauge Cars to Standard Gauge Building the Jean-Pierre Rheaume Memorial Bridge Modelers and Suppliers a Winning Team! A PSC Harriman Goes Western Pacific Let's Build an InterMountain Boxcar The Country Crossing Layout Design "New Tracks" Shows, Meets and so much more...

FINE SCALE MODELS FROM THE ORIENT

Golden Gate Depot 231 Market Place Suite 223 San Ramon, CA 94583

Heavy Weight 70' Baggage, 70' RPO, 80' Diner, 85' Obs. 85' Pullman Observation Car

Scale Accuracy: Full Scale, Heavy Weight Cars, were used by many railroads all the way through the steam era. These super detailed cars have operating baggage and passenger doors, overhead LED, "Flicker Free" lighting and passenger interior with 10 figures in each car (except Bag / RPO), flush fitting windows, close coupling, complete underbody treatment and highly detailed die cast trucks. PRR BM70, B70 with PRR Trucks. There is nothing finer.

Operation: Designed to operate on 054 or larger 3 Rail Track. 48" Radius or larger O Scale Track.

Liveries: B&O - C&O - CB&Q - CN - CP - ERIE - GN LACK - MILW - N&W - NH GREEN - NP - NYCTTG NYC GREEN - PRR - PULLMAN - RIO GRANDE - SF SP GREEN - SP DAYLIGHT - SPTTG - UNDEC GREEN UPTTG - UPY and More...







DENG

DEPO

PRR B70 Baggage

0





sales@goldengatedepot.com



Published Bi Monthly

The Model Railroad Resource LLC 407 East Chippewa Street Dwight, Illinois 60420 815-584-1577

> Owner / Publisher Amy Dawdy

Managing Editor / Advertising Executive Daniel Dawdy

January/February 2018 Volume 5 No. 3

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 Santiago Pineda's PSC Harriman car. Studio shot by Santiago Pineda

> > Rear Cover Photo

Indianapolis O & S Scale Show 2018

- 3 Bill Of Lading
- 4 From the Publisher's Desk
- 6 News You Can Use New Items of Interest
- **10 New Tracks** *A new mentoring section by Jim Kellow MMR*

BILL OF LADING

- 12 Modelers and Suppliers a Winning Team! Jim Kellow MMR
- 17 Building the Jean-Pierre Rheaume Memorial Bridge By Serge Lebel
- **28 A PSC Harriman goes Western Pacific** *By Santiago Pineda*
- **38 Let's Build Something** Dan gets back to kit building with an InterMountain Boxcar
- 63 The Country Crossing A plan for a specific scene - By Pete Mottershead
- 73 A Rebirthing Operation Converting Narrow Gauge Cars to Standard Gauge Traction Cars - By George Paxon
- 84 Rockford O Scalers Open House
- 85 2017 Fall Spokane Train Show
- 89 What's on your workbench today?
- **90** Oddity One that is odd
- 91 NEW Reader Classifieds Buy ~ Sell ~ Trade
- 93 Show Schedule
- 94 Classified Ads / Advertiser Index
- 95 Chicago Model Contest Information

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.

From the Publisher's Desk

"Two small jumps are sometimes better than one big leap."

How many times have you taken one big leap only to be disappointed with the outcome? This has happened to me with quilting and other hobbies I have tried. We want to do something, so we jump in head first instead of wading in slowly feet first. Why is it that we want to start with the most complex project, and expect the outcome to be perfect the first time? Dan's article in this issue on building an InterMountain boxcar shows you what happens when you employ the two small jumps method. Also in this issue, "New Tracks" by Jim Kellow MMR shows what can happen using this method. With the help and encouragement of fellow modelers, you can take two small jumps and learn a lot more than if you took one big leap.

The above quote was the saying in a fortune cookie on our recent trip to Phoenix where we visited Dave Meek in Jerome, Arizona and saw his On30 Thunder Mesa Mining Company Railroad. We'll have more about that in a future issue, but if you'd like a sneak peek go to http://thundermesa.studio/thunder-mesa-mining-co-model-railroad/.

Dan and I also traveled to Ohio in November for the Cleveland 2-Rail O Scale Meet. See the video Dan posted here: https://www.youtube.com/watch?v=GN0cN2akL70 This is a great one-day show with a dinner held in the historic Painesville depot the night before.

I always wish everyone a healthy and happy new year, and this year is no different. With respect to my own health, 2018 will bring some challenges. I was diagnosed with breast cancer just before Thanksgiving, and I will be undergoing surgery in early January. We caught it early and I cannot stress enough the importance of mammograms. This holiday season has been kind of crazy with doctor's appointments and tests. In fact, I just finished the last of my holiday baking today – Christmas Eve! I have never been this late, but was bound and determined to continue my annual traditions. Hopefully, next year won't be quite as crazy.

The Model Railroad Resource is once again sponsoring the model contest at the March Chicago O Scale Meet in Lombard, Illinois March 16-18. Provided my treatment goes well, I plan on attending. So get busy and start building or finishing your entry for everyone so see. I'm looking forward to seeing everyone there!

Happy New Year, Happy Reading & Happy Modeling,

Amy Dawdy

BUY • SELL • TRADE CLINICS • LAYOUT TOURS • VENDORS & MORE!

CHICAGO 'O' SCALE MEET March 16-18, 2018

P:48 On30 On2 Traction Railroadiana





REGISTER NOW ONLINE: www.marchmeet.net CALL: 1-630-745-7600 MAIL: 2636 Hallquist Ave. Red Wing, MN 55066 Westin Lombard Yorktown Center 70 Yorktown Center Lombard, IL 60148 1-800-937-8461 Ask for the Chicago 'O' Scale Rate

REGISTER EARLY for Easy Check-in & Preprinted badges! • Limited tables available!



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







1524 Lee St., Des Plaines, IL. 60018 Ph. 847-297-2118 Open Week Ends www.desplainshobbies.com

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



NEWS YOU CAN USE

Atlas O announces new paint schemes for their Atlas Master® O Trinity 5161 Covered Hopper and their Atlas Master® O PRR H21A Hopper.

One of the most familiar Pennsylvania Railroad freight cars of all time, the H21a was also the largest single hopper car class on the PRR. With over 39,000 cars built, the H21a had an amazing history of service and longevity with several hundred cars lasting well into the Penn Central era. During the 1940s and early 1950s, these hoppers were leased to both the Norfolk & Western and Virginian railroads. Atlas O's version is realistically duplicated from designs based upon actual historical documentation of the lease agreements.



In 1995, Trinity Industries introduced a new center-sill design covered hopper car designed primarily for grain transport. The new design was visually quite different - this one featured curved sides versus previously familiar rib-sided design adopted from Pullman-Standard. The new 5161 cubic-foot capacity design along with the recently introduced allowable 286,000 lbs GRL (Gross Rail Loading) brought a new standard to the industry (Trinity's competition were ACF and Thrall).



See their Website for more information, paint schemes and car numbers.

Jim King from Smoky Mountain Model Works,

Inc. Has announced an O scale AAR 70t flatcar. This is my "re-entry to O scale" kit after nearly ten years focusing on other scales. During this decade, I've continued to improve 3D modeling, pattern generation and urethane casting techniques. This kit represents the "State of the Art" in rapid prototyping and custom resin casting.



In 1941, the War Emergency Board approved a basic, 70-ton capacity, riveted-construction flat car. 10 roads bought cars of this design in multiple production lots spanning January 1942 to August 1944. Most roads converted some of their cars to carry specific loads, such as pulpwood, automobile and truck frames, containers, pipe, lumber, sheet rock and piggyback trailers (with a hitch, end ramps and side rails). B&O and 3 other roads added bulkheads.

See their Website for more details.



Woodland Scenics® has a New Built-&-Ready® Building: Letters, Parcels & Post.



Whether you're sending a letter or patiently waiting on a package—Letters, Parcels & Post is there for all of your mailing needs.

Letters, Parcels & Post includes a rugged stone foundation, plenty of windows for showing off the printed interior and a light for highlighting the flag. A covered porch provides a place to wait when the lines are long, and a set of stairs lead to a side door. Additional features include a chimney, rear loading dock and an unattached mailbox for dropping off mail at any time of day.

This building comes with pre-installed interior and exterior LED lighting made for use with the Just Plug Lighting System.

See their Website for more details.

Steve Wolcott from Pre-Size Model Specialities

says: Pre-Size Model Specialties has produced O scale models of the Soldier Summit tunnel portals. The D&RGW built these tunnels in 1912 and 1913. Both years are offered. Cast in engineering quality resin.

Overall: 8-1/4" wide x 8" tall

Opening: 4-3/8" wide x 6-1/8" tall

This is a model of portals on the D&RGW (now UP) line over Soldier Summit, includes prototype photo.



\$34.50, free shipping. See their Website for all their O Scale products.



New from Rusty Rail. This is a new O scale figure. When he was a little guy he picked up the



nickname 'Tiny' and it stuck with him. As you can see he is a big boy. Figure comes with the left arm positional so you can change the pose. The master for Tiny was printed on the 3D printer. All resin casting and comes unpainted.

Here we have a junk pile that would look good in the back of an industry example mining or logging shops or even out in a field be itself. In the pictures you can see how the casting is blended into scenery to

make a convincing scene. The casting measures 3 3/4" by 3 3/4" and 1 1/4" tall. The casting is resin and sold unpainted.



New Tsunami2[™] Diesel Sounds and Features:

GEVO G12 Tier 4: Updated Tsunami2 Diesel Digital Sound Decoders are available through your local hobby shop or online retailer.

Updated decoders have all of the cutting-edge features that Tsunami2 has to offer and more. New GE specific features include:

- ► GEVO G12 Tier 4 (GE Prime Mover)
- Prime Mover Pitch Shift

Create unique sounding locomotives in a consist, while using the same prime mover sound selection.

- ► Updated GE Dynamic Braking Effects
- Electronic Air Dryer

Replicate a more modern air dryer system with a noticeable change in the release rate sound of the poppet valve.

All formats also have Hyperdrive2TM advanced motor control, simplified function mapping using Flex-Map technology, Dynamic Digital ExhaustTM, and more.



For easy identification all updated, Tsunami2 packages will feature a brightly colored sticker. The software version (V1.2) is also indicated on the back of the package in the lower right-hand corner.

See their Website for full details.

Nick Masney from ITLA Scale Models Inc.

has announced a new O scale Loading Dock Interior Kit featureing :

- 3 "walls" comprising the interior loading dock area
- Laser etched wood planked loading dock floor
- Support bracket which sets the floor at a 1.2" height (optional use)
- 2 layers of "3D etched" crates to form the backdrop (rear) wall
- ► 3 ITLA pallets
- 5 additional crates for placement within the loading dock area
- 1 finely cut ladder for HO scale access to your loading dock





Easily brush paintable with water based acrylic craft paints. Full colour assembly instructions included. Fits behind a 1.8" tall door with a minimum floor level of 0.12". Many different interior configurations are possible with the individual pallets, ladder, and crates included. The backdrop (rear wall) of crates can be cut apart and rearranged for a different "look" across multiple copies of this kit. Also available is a unique laser etching process enabling them to produce this weathered & distressed wood floor and bulkhead ends for the O Scale Atlas Trainman 62ft Bulkhead Flatcar model.

Glue this real wood decking directly over the shiny plastic stock floor of the original model to produce immediate realism. No paint required. You can feel the individual board detail and might even get your hands dirty, just like the real thing!





See their Website for more information and pricing.



2286 Hampton Way Clovis, CA 93611 559.297.0505

Jay@right-o-way.us http://right-o-way.us







What is the definition of a mentor? "A TRUSTED COUNSELOR OR GUIDE" By Jim Kellow MMR

I had a great mentor and have also mentored other modelers. So I know the value of having a mentor, and the rewards from giving back and being a mentor to someone else. My mentor was one of the most accomplished model railroaders I have ever met and a true craftsman and artist. I was lucky to have had his help for a long time in my modeling career. His guidance in developing my skills and his belief in me developed the confidence in my abilities to succeed in building models and to constantly go down "New Tracks".

He constantly challenged me; he encouraged me to think through building problems, and select approaches that could best solve the problem. He also gave me his wealth of experience in model building when I needed it the most. While he is no longer with us, I can still hear his voice in my ear every time I sit down at my workbench. As I look back on what I really learned from my mentor, I realize he was not there to correct every mistake I made, but rather teach me a way of planning and thinking about building a model that taught me how to make less mistakes. Then "when" not "if" I did make a mistake, I learned how to fix it. Over time, his experience and skills got through to me and my building ability and confidence to try to build a project improved drastically. These improvements did not happen overnight, but gradually over time.

The Merriam-Webster Online Dictionary defines a mentor as **"a trusted counselor or guide".** In a few words, that is what my mentor was for me. In future articles, this is the definition I will use to define a mentor.

I hope that the series of articles I am writing on Mentoring can help you have one of the greatest educational experiences in my life – "A Mentor" to help me go down "New Tracks". I encourage modelers who want help to seek out their own mentor. I also encourage mentors to make themselves known.

My articles are an attempt to get mentors and mentees together, to encourage more model building, and to help pass the vast knowledge and experience of our Master Modelers of today to the next generation of modelers so they to can go down "New Tracks" in the future.

Last September, I discussed with this idea with Daniel Dawdy, who publishes *The O Scale Resource* online magazine, that modelers are not building as much as they used to. I proposed writing a series of articles on the importance of a modeler having a highly skilled Master Modeler to be his/her mentor. This mentor will not only help a less experienced modeler learn and develop the skills, techniques, and methods needed to build outstanding models, but also help him or her gain the confidence and positive attitude to believe in their own building ability. I truly believe gaining this confidence and having a positive attitude toward your ability to build is one of the greatest assets a modeler can have. "Yes I can, and if I make a mistake I can fix it" is an attitude my mentor taught me and which I found critical to my success in model building.

Daniel said he was interested and so he published my first "New Tracks" article in *The O Scale Resource* online magazine in the November December 2017 issue. We also felt a Facebook page for "New Tracks" would be beneficial in helping modelers find mentors and become better model builders. I chose the name "New Tracks" for the articles because I believe that as a modeler decides to develop his skills or improve his building ability, he will go down paths he has not traveled before. Therefore the title "New Tracks". We both hope the "New Tracks" series and Facebook page is well received and will be beneficial to modelers by building their confidence, increasing their skill levels, and encouraging their model building.

This issue of *The O Scale Resource* contains my second article in the series. It discusses the importance of suppliers in helping modelers find a mentor. Future articles will announce O scale contests you can enter online, information on Master Modelers who have agreed to be a mentor to less experienced modelers and other ideas that I hope you will enjoy and help you travel "New Tracks" to better building. Good luck and please give me feedback on what you would like me to include in the "New Tracks" articles. My email is JimKellow@oscaleresource.com.



Find us on **facebook**

The Model Railroad Resource, in conjection with Jim Kellow, are pleased to announce a new FaceBook page, as well as a serires of articles in both *The O Scale Resource* and *The S Scale Resource*.

There is only so much information about mentoring that can be published in a magazine article in a single issue; therefore, Jim Kellow

MMR, who is writing this mentoring series he calls "New Tracks" suggested the magazine start a mentoring site on Facebook so more information can be made available and more modelers can benefit. After all, the confidence a modeler must have to begin building a model is the same for all scales. Likewise, the skills and techniques of building a model or even a complete railroad are basically the same. The site has just become active, so we hope you become a friend of the site and begin to get the information that may help you build outstanding models and even create your own railroad empire.

The "NEW TRACKS" FaceBook site is meant to be a place where highly experienced knowledgeable model railroaders can become a mentor to help less experienced modelers gain the skills and techniques of building a model, as well as the confidence in their ability to begin a modeling project or even complete their own railroad empire. Jim Kellow, MMR 202 can personally vouch for the value of a mentor to teach you to be the modeler you want to be. Jim wrote about his personal experience in the first "New Tracks" article in the November/December 2017 issue of *The O Scale Resource* online magazine.

This site, we hope, will become the premier place for mentors, and the modelers who want to learn from them, to meet. If you need model railroad building help to become the modeler you have always dreamed of, this is the site for you.

All scales are welcome because the skills and techniques of building a model railroad are basically the same for all scales. Most importantly, the personal CONFIDENCE needed by a modeler to begin a building project is the same for all scales. The only way to get this confidence is by building, making mistakes and doing it again until it is done correctly. Having a mentor will make this learning period much shorter and more fun. Good Luck and Happy Building!



By Jim Kellow MMR

Partnering Mentoring Building

Suppliers listen up! This is a great opportunity for you.

It has been several weeks since I wrote the first article on mentoring, and I cannot stop thinking about how modelers can find a mentor. Someone to work with them on a modeling subject they want to learn about, or learn a new skill that will improve their modeling efforts. I have heard positive comments from readers since publishing the first mentor article, and I look forward to hearing from more of you. Your questions, suggestions, and comments are always welcome.



Jim Kellow's old Lionel layout

Modelers, this can be a great opportunity for you to go down "New Tracks" and learn some new skills. I know that was my experience. Suppliers, this is an opportunity to help existing customers and gain new ones. A win win for everyone!

At the time I started looking for my mentor, I was a lone wolf model railroader with a fairly extensive Lionel

railroad and collection. I had my basement layout, my trains, and a love for the hobby going back to my childhood, but did not belong to any clubs or organizations with other modelers in my area. Nor did I really know anyone in my part of the world who was also a modeler, let alone someone who could help me learn "stuff" about the art and craftsmanship of building a model railroad.



Oh sure I subscribed to all the model magazines, but I really wanted to learn a specific skill, and while some of the magazine articles provided motivation and some help, I knew I needed more.

The skill I wanted to learn was building models in brass. Since I had zero experience, I needed a person who could work specifically with me and give me the knowledge and

confidence to be successful in my brass building efforts. At this point, I was afraid to even try to build something in brass, let alone, have the tools I would need.

Why all of a sudden did I want to go from ready to run Lionel to scratch building models in brass? I met Rick Shoup MMR, who at the time was the NMRA National Achievement Program Chairman. Through Rick, I found out about the NMRA, it's Achievement Program and model contests. I wanted to try my hand in model



Rick Shoup MMR

contests and in gaining awards in the NMRA achievement program. So thanks to Rick, I joined the NMRA. I would encourage modelers to look into the NMRA Achievement Program because you will learn a great deal from your participation. My next step was learning to build in brass.

I never knew at the time how these "New Tracks" I was about to go down would totally change my modeling interest and introduce me to many new friends. Some of these people I have written about in articles published in other publications. People such as Ronnie Rise MMR who was the person who taught me how to use thin cedar cigar dividers to make O scale cedar shingles for my structures. Ronnie is no longer with us but I think about him every time I build a cedar shingle roof. Ronnie even made a

machine that could produce the 1,000s of O scale shingles he needed for his structures. Also, David Sellers has been a real inspiration to me. David's model railroad was recently published in *Model Railroader* magazine's annual publication. Great modeler.



Ronnie Rise taught me to make cedar shingles. Picture above is a model built by Ronnie.



Warren Lewis Layout. Mr Lewis was 80 years old and continued to model!

So to find someone to help me, I called a model supplier I had been using for awhile and asked him if he knew of a person who lived close to me I could call for help. His first response was "I do not know". My second question was did he have any customers besides me who lived in my zip code. His first response was "I do not know". Keep in mind this was 25+ years ago and let's face it few of us were computerized. I asked him to think about it and let me know if he came up with a name.

In a week or so, he called me with a person's name who lived reasonably close to me and who had agreed to at least talk to me. He was Warren Lewis. I was surprised when I saw his Traction Railroad as he is the only person I know who used N scale rail for his overhead wire. I must admit there was no sag in his overhead. I liked Warren immediately, and our first meeting started a long friendship. Unfortunately he is no longer with us, but I will never forget his willingness to help me. He told me he knew a man who just might be what I was looking for.

He and Warren both belonged to a local Traction Club and Warren invited me to join him at the next meeting. Traction! Overhead wire, what on earth? I wanted help with learning to build models in brass! But I went. The meeting was at Harry Darst's house. We went into his basement and I saw an extensive HO model railroad. It was beautiful. I also saw a complete metal working shop in one corner. Thus I met Harry and his wife Hanna. We talked and he invited me back for more talk. I had found my mentor, and he agreed to work with me. Harry was an artist, as well as a highly skilled modeler who scratch built HO and O scale traction models in brass. A marriage made in heaven as they say. This was also why I got started in O scale traction.

Will a supplier be one possible source for you to find a mentor as one was for me? I believe so. For one thing, they know who is buying building supplies from them that you will probably also need. For another, they have a fair idea who is building models like you want to build, or just opening a box and putting an item on their layout. Therefore, they know which customers they would want to recommend to another customer for help.

So how to get the ball going? Each of you could just pick up the phone and call your favorite supplier. I hope you do. For those of you not sure you have a current supplier, (Old what's his name?) remember this used to be your local hobby shop.

I have another idea. Let's ask the suppliers of kits and building supplies to let you know they are interested in helping modelers find a person who might help them. No I am not talking about suppliers spending money on advertising, I will do that in this column in the future for them for free, if they will email me at JimKellow@oscaleresource.com or let me know on my Facebook page and tell me they are interested in helping modelers to find help in improving their modeling skills and craftsmanship.

That is all a supplier needs to do, and in my future columns I will tell you who they are and hopefully the kind of help they might provide. All it will cost a supplier to get involved with helping a modeler find a mentor is the time to contact me. I am even willing to help as an intermediary if that will help get this program started.

Why should a supplier want to participate in this effort? More customers spending more money! Good will for all their customers! Should modelers be interested in knowing who these suppliers are? Of course! These suppliers become their "go to" guys for help or at least direction to a person who can help them. Sounds like a win win situation for both suppliers and modelers. And no one is being asked to spend money up front to get this effort started.

I am really interested in having the skills and craftsmanship of highly skilled model railroaders passed along to future model railroaders. I hope this effort can help and will do anything I can to move this effort along.

So suppliers, let me hear from you and let's get this effort started. Your existing and future customers will thank and reward you. And modelers, contact your existing suppliers and ask them to put you in touch with one of their experienced modelers who can help you in your modeling journey. Good luck.

By the way, I am convinced that suppliers will be interested in this effort. Several years ago I was a regional NMRA Achievement Program Chairman and called American Beauty, in my opinion the premier soldering equipment manufacturer, whose equipment I have been using for years, and asked them to sponsor a "build in brass contest" for the convention. I had written an article about their company and equipment for another magazine years before and felt comfortable asking for their help. They immediately agreed and provided one of their complete soldering outfits as the prize for the building in brass contest at the regional convention. We had more models built in brass entered in the contest than expected and the contest was a huge success and also a success for American Beauty.



American Beauty resistance soldering unit and brass open top stock car built by author.

I invite one or more suppliers to volunteer to offer to sponsor a contest for a modeler and his mentor through this magazine. It does not have to be a brass building contest it can be building anything. I know I will hear from some suppliers on this idea. More on this later. Also I have some other ideas to share with you in future columns to get mentors and modelers together.

By the way, I joined the Traction club Warren and Harry belonged to. It was a great club and I miss the many great people I met. The name of the club is Detroit United Railway. At the time, to become a member you had to have or be building a traction layout. So my first traction layout was born. Oh the "New Tracks" I went down. Lionel 3 rail to 2 rail O scale traction.

Questions, comments? Email Jim here.

And join our New Tracks FaceBook page here!

Canadian National Railways Sanmore Subdivision

Building the Jean-Pierre Rheaume Memorial Bridge

By Serge Lebel





It is no secret that model railroading is a fascinating hobby. I am one of those guys who has to be creative all the time. Normally, I would be bored out of my mind with my day job, but because my hobby is model railroading and because my day job is being an engineer on an actual railroad, my job fuels my motivation and creativity to a level of great enjoyment in my hobby. Still, being creative does not mean I have to re-invent the wheel with every project.

Such is the case for the project I want to share with you in these lines. A few years ago, a good friend of mine who was also an O scale 2-rail modeler, Jean-Pierre Rheaume, passed away. As a result of his passing, I inherited a beautiful Atlas truss bridge which he had on his layout. The bridge was assembled as per the kit's

instructions and was kept in it's original black plastic finish. I was torn between keeping the bridge intact as a token of respect for my friend, or modifying it to fill the gap I had already in place for such a project. But the bridge was too short for this specific space and I had no other place to install it, since all my planned bridges are even longer than this one.



So it was decided that if I was going to modify the bridge, it would have to be done in a way that would make my friend Jean-Pierre proud. Now my layout is at a very early stage of construction, and in that area I only had the benchwork in place with a small strip of wood in place of a future bridge. That left ample space for me to design the bridge of my choice. I really liked Jean-Pierre's bridge but felt it was too short to fill such a long gap in the benchwork. I wanted a wide river scene with river banks that would slope gently instead of compressing everything into a deep and steep valley. This is where careful planning ahead of time pays off. I drafted the entire track plan months ahead of hammering the first nail in the basement. To me, it makes more sense to build benchwork that fits the track plan, instead of building benchwork and *then* figuring out where the

tracks will go and what the scene is going to be. Below is the section of the track plan showing the bridge over the Maria River:



So I purchased a second bridge to make the span longer. After assembling the second bridge and putting it in place, I felt it still lacked something. Looking at prototype photos on the web, I noticed a lot of bridges have approach spans, so I decided to add one approach span to each end.

This is where I used the "good enough" philosophy. I could have probably spent a good amount of money to purchase the Atlas O scale plate girder bridge, or take a few weeks to scratchbuild the approach span out of styrene, but I decided to go a different route. I noticed that on his layout, Jean-Pierre had previously used an Atlas HO plate girder bridge which when turned upside down, made a believable O scale (or close enough) deck bridge. These have been in production for as long as I can remember and they can be found at shows all the time. I purchased four used units for \$20... Not too much of an expense for a test.





Now all I needed was a way to tie everything together to make it look like it belongs. Since my layout is made with hand laid track, it was only logical that the bridge would have the same ties and rail as the rest of the layout. That was the key to making everything come together. So I cut some bridge ties to fit the width of the space available on the Atlas truss bridge once the plastic ties/deck was removed. I did have to fill the frame with some support in order to make the four bridge parts all the same level, making a uniform bed all through the bridge to support the ties. Not being too worried that this part would show once finished, I decided to make these shims out of wood since it was much easier to trim to the correct thickness. Those were laid on top of the existing bridge frame and glued with epoxy. That entire assembly was painted a nice "machinery green" as so often seen here on the Canadian National Railways. I used Testors pale green which I airbrushed over a thin coat of grey primer.

Next, I glued all the deck ties to a set of top plate supports. These were made on my laser engraver and have holes pre-drilled at the location where the top plate would be attached to each tie. This gave me an alignment and spacing for the individual ties.

Once the glue on the deck was dry, I stained the entire deck with my regular mix of Minwax special oak and ebony stain. Using my laser engraver, I cut 704 double-wide tie plates from plain cardboard which had been pre-painted in a rust/brown color (good enough, remember?). I had also purchased some 800 Grandt Line nuts/bolts plastic castings to insert in the pre-drilled holes.



Once the deck was done, I spiked the rails in place, working at the workbench on a flat surface. The entire deck assembly was now ready to insert on the bridge. This is when I decided to do all the weathering on



the "steel" part of the bridge so the deck would not catch any of the rust powders which would have looked out of place on the wood. The weathering was done by mixing a 70/30 part water and brown acrylic paint and spraying it on the bridge using a mist bottle (an empty Windex bottle), and then dabbing the wet structure with undiluted paint with a sea sponge. This created some dark 'blobs' which were then saturated with rust colored weathering chalks and left to dry. This is my quick and easy weathering technique and it yields a reasonable result.



The weathering is really stunning and a very easy process.





Making the support pillars and abutments.

So the gap was now spanned to it's entire 96 inches with the bridge, and it was now time to figure out some type of pillars for support. Looking at bridge photos on the web, I really liked the way a poured concrete support looks for this type of bridge. Again, I wanted to build something unique that would fit the space instead of buying commercial parts. So with that in mind, I scribbled a sketch of what I wanted and tried my best to figure out what would be the best method and material to build the parts.

My initial thought was to try to make some type of plaster casting. But the more I looked at my sketch, the less convinced I was that I could cast such complex parts. That is when I remembered I had some material that would do the trick : Signfoam!

What is Signfoam you ask? Signfoam is the brand name for a commercial product known to sign makers as high density urethane, or HDU. It is a closed-cell very dense urethane board that is compressed when it is casted. It comes in various thinknesses from 1/2 inch to 2 inches , in 4' x 8' sheets, and in various density, depending on the application (usually, sign crafters will use density between 15 and 18 pounds per cubic inches). These can be found at specialized suppliers for sign crafters. A 2 inch thick sheet sells for anywhere between \$400 and \$500. This product is hard enough to take a direct hit, but soft enough to be cut and sculpted by hand with basic woodworking tools.

A good ten years ago, I was a sign shop owner and I made a lot of sculpted, sandblasted and CNC machined dimensional signs using this material. I always saved the scraps, cut-outs, corners, and kept them in a box. I knew they would come in handy one of these days. So, sorting through my scraps, I found large enough parts to make the abutments. I simply drew the basic shapes on the HDU and cut them on the band saw. Then, using the table saw with the blade at an angle, I made the angled cuts to have the sides of the abutments at a 30 degree angle. I also made a smaller square part that would serve as support for the deck of the bridge, and test-fitted everything.



Before gluing the parts together, I used a light grade sandpaper (about 220 grit) and, guiding my strokes with a straight piece of wood, carved some horizontal strokes to simulate the plywood sheets that would have been used as a casing for the poured concrete on the prototype. If you wish to make the concrete look even older, you can easily carve some cracks using the tip of an Xacto knife. I used cabinet makers' grade





wood glue which worked fine, but Gorilla glue is usually the preference of sign crafters, especially for exterior applications.

The only thing that was left to do now was the three main support pillars for the bridge, where it crosses over water. Looking at my scraps, I did not have any pieces large enough to get the job done. But HDU is a fantastic material to work with, and it can be pieced together with glue in any manner, since it has no grain to it. So I stacked all my pieces together and glued them to make three large blocks. I was not too concerned with the layers of glue showing through because I oriented them to simulate the streaks I had carved in my abutments.

I let these dry for about five days just to be on the safe side. I then shaped the pillars by first cutting them on the table saw to their approximate shape, then finishing the shape with the belt sander. A word of caution here; use very light pressure on the belt sander when doing this, otherwise it will take too much off! I then fitted a top piece a bit larger than the pillars to complete the design.

The O Scale Resource January/February 2018







When it comes to painting, I would normally use a high-build water based primer like Jay Cooke's, but that is only if vou want to seal off all the cells for a uniform finish. Since concrete is usually rough, the texture of the HDU will yield a great concrete look without any filling primer. I just used some water based paint from the craft store directly on the HDU. A single coat was enough, because I did not want to hide the opened cells. If you have any imperfections or gaps you want to fill, you can use some wood filler putty prior to painting. Once the

paint was dry, I brushed on a wash of diluted India ink and alcohol, and then finished with dry weathering powders.

I have found this to be the easiest way to create complex shapes in no time at all. HDU can also be used for foundations on buildings, or any structure that is made of concrete in real life. I suggest looking through the phone book in your area and finding a local sign shop that specializes in carved or sandblasted signs, and ask them if you can buy their scraps, explaining that you will be using them to build scale models, not signs. I am sure they will be happy to save you some nice pieces!

There you have it. At this point, I have no scenery on my layout so the bridge does not reflect it's full prestige, but keep reading *The O Scale Resource* in the future, and I promise I will do a follow-up on the layout with some finished scenery. There is still about 60% of my benchwork that needs to be done and I will have two more bridges to build... Perhaps more kitbashing will emerge out of this!

A PSC HARRIMAN GOES WESTERN PACIFIC

By Santiago Pineda



Few trains are as beloved as the California Zephyr. The gleaming arrow of stainless steel is iconic to say the least. With Atlas having released the entire train, and Key Model Imports seemingly on the verge of delivering their version, it is safe to say that the Silver Lady has had a prominent place in our hobby in recent years. If you are a Zephyr modeler however, you may also want to consider its fascinating predecessor: *The Exposition Flyer*.



An eastbound Expo, train No. 40, charges near Keenesburg on March 1, 1940. Hank Brown photo, Burlington Route Historical Society collection.

As an interesting complexity, *The Exposition Flyer* featured some of the most varied, stylish and unique equipment you can find. A recurrent head-end was the distinctive Western Pacific Harriman 60' baggage car. Herein, I took a Precision Scale Southern Pacific car and adapted it to reflect Western Pacific standards. While this car is not a complete match to the prototype, it is likely the closest thing we have in O scale.

I began by submerging the car in paint thinner to remove the custom Rock Island paint job. With a clean body to work on, I removed all the extensive roof details while leaving the side vents in place. I drilled several holes at both ends of the car where some grab irons and brake valve details would be later added. Most detailing references came from the brasstrains.com image database, where I found the definite rendition of this car made by The Division Point in HO scale a few years ago; using this asset was crucial in providing information where prototype photography fell short. I encourage you to go through their archive for reference of a produced piece; their documentation team does an excellent job at capturing models from a manifold of angles.







My girl looking studious after a long study session of Burlington Bulletin #42, the most comprehensive title on the history of the Exposition Flyer. The most extensive modifications were done to the undercarriage. I essentially unsoldered most of the parts since they needed to be either moved or removed altogether. This also allowed me to solder back some frame joints that had become loose. Some noteworthy added details include the belt to the DC turbo generator, coupler cut levers, passenger style steps, a batteries plug connection and a couple of kitbashed battery boxes. *See pictures on next page*.





The Pullman four-wheel trucks also required some attention. Considering the soldering joints were coming undone, I decided to solder them to a rigid position. This took away the equalizing feature, but it allowed me to upgrade the springs to a more prototypical look. The PSC springs were too thin and the rings too far apart. I formed thicker copper wires that look closer to the prototype and add a sense of weight to the overall look of the car. The last step was to attach Precision Scale 32 links per inch chains to the correct spots. To do this, I drilled the trucks and glued small rings with epoxy two-part resin.





A detail that sets this car apart is the express baggage cardholder. Since SP cars didn't have this feature, I had to find a way to model it. I solved this by using Archer's raised panel lines on top of a thin copper sheet. Archer's raised details really help give the cardholder a relief effect. Notice that Archer's texture details function just like water slide decals, which makes placement user friendly.

Below: I built jail bars out of 0.15 metal wire. Here you can see them before soldering and after painting.



No project is without its issues. There was a painting related problem that set back the progress considerably. After priming the body using Vallejo's acrylic primer, I noticed that even some light handling scratched the product away. So, when I tried to sand down some rough areas, it peeled revealing the bare brass immediately. At any rate, it became evident that there was no choice but to repeat the painting process.





The second time around, I used Revell's Basic primer. The toughness of this product is outstanding; you can't even scratch it with your fingernails! No, it doesn't leave a perfect surface after spraying, but you

can confidently sand it to achieve a glass-smooth surface. The painting process later resumed without any holdups. For paints, I used Revell enamels, and for the clear coat, Micro Scale Satin finish.





A big revelation during this project was dry transfers. Specially the ones made by Clover House. For the top lettering and numbering, I used a NORTHWESTERN PACIFIC set, of which I simply discarded the NORTH part. And for the lower lettering, I used their passenger car names set. The quality of this product is positively amazing, the sharp and thin finish rivals some of the most sophisticated Tampo printed cars like the PSC CB&Q

express BE-1 car. Dry transfers are a remarkable option, from now on I will choose them over decals whenever possible.







This car is only a glimpse into a train that paved the way for an American superstar. Hopefully, we are not too far from someone producing a correct *Exposition Flyer* in O scale. Meanwhile, us Expo lovers will continue to upgrade, modify, build and assemble these difficult but exceptional consists.








A post-war "Alice", CB&Q #4000, charges near Creston with the Exposition Flyer.



Brand new CB&Q F3's pull the Expo in 1947. The California Zephyr is not far from entering full service.

Let's Build Something InterMountain Boxcar

By Daniel Dawdy



Way back as a kid, I was into Lionel. That was what stared me in trains. I also loved to build models. Mostly airplanes and ships. Companies like Monogram, Aurora, Revell and others. Testers little square bottles of paint and that great smelling testers glue. The thing was, they were fairly easy to put together. Things just fit with minimal of cleaning parts off the sprue.



So back in the 1990's, I saw the new InterMountain reefers and boxcars kits and gave them a try. Beautiful models and fantastic, but delicate detail. I ended up building about 20 of these, and once past the first one, I got it down to a science. The reefers took a bit longer to build because of the doors and the roof hatches, but I was able to get one completed in about four hours.

Now I can hear people already... why are you doing an article on a kit that's been out of production almost 20 years! Well, it's a great kit, and I see these at shows for \$15 to \$20! That's about two stops at Starbucks or McDonald's. Many don't like the prices of the newer ready to run Atlas cars, and these will make up into a beautiful car with just a little effort and there are a lot of kits still out there. This is a great car to get started in building. Once you build one of these and get some confidence, you can move on to other nice kits like San Juan Car Company, Rails Unlimited, BTS, La Belle and so many others.



The first thing I need to mention is that the instructions leave a bit to be desired, especially on the brake rigging. We'll help cover that and other items as we go. What we'll do is follow the instructions in the box, and for each section, explain a bit more.

One of the many cars I built back in the day. The boxcar kits came in different door, roof and body end configurations but the construction is the same. You can see the door differences in the top picture between the C&EI and the EJ&E cars.



A few basic tools and supplies.

Some of these are optional like the taps and pin vice for the coupler. We'll touch on those in the article as we progress.

I have switched to MEK for all gluing of parts. It's less money, and I simply refill the old bottles.

Always use caution with any glues.



Here are the parts out of the box less wheels which are no shown.

As far as tools, the number one thing is a lot of new sharp X-ACTO No.11 blades. I buy mine in a 100 pack so I can change them as needed. A sprue nippers will work, but be careful as some of these parts are hard to get into. An Emery board type nail file is also a must, along with Liquid Plastic cement, I used MEK.

Tweezers are helpful as are glue applicators. (See picture on previous page) There will be optional items which we'll cover within the article.





Above: Holes drilled in roof waiting to receive the roofwalk and its pins.

Below: Pins cut off and the bottom the roofwalk sanded smooth. No amount of gluing would have flattened out the roofwalk with the pins. Luckily we can't see the holes once the roofwalk is glued on. (Thank heavens!)



The O Scale Resource January/February 2018

The back of the roofwalk has four, or sometimes five, molded-on pins. The inside of the roof has drilling holes marked for these pins. In all the models I previously built, I cut these pins and sanded smooth. This time, I decided to try it with the pins. They call for a number 30 dill bit which I don't have so I used an 1/8" drill and





Roof finished and drying with weights.

slowly drilled from the inside of the roof out. Go slow so you don't melt the plastic. Then, using a small round file, I cleaned the holes and inserted the roofwalk. *Don't do that!* With the roofwalk in, the holes in the middle of the walk were forced up like it was in too long between the holes. (Sorry, this is the one picture I forgot to



take.) I was not about to make the holes larger or oblong, so I went on to plan B.

Removing the pins from the underside of the roofwalk and then sanding smooth, I glued the roofwalk to one end of the the roof. I then added a weight and let that end set up. With the weight in place, I could gently lift up the other end of the roofwalk and using a small applicator, add the liquid cement to the underside of the roofwalk where the roof rib would hit. I glued a few and weighted it again and then finished up. The holes that I needlessly drilled can not be seen so we're good there.

Doors and Door Detail

Pictured at left is the door sprue. There are six different types of parts to be taken off. The doors, 2 door

guides with handles on the far left, then 2 door guides without handles, 2 small door handles and two smaller door handles and finally the 2 door latches.

I made the rookie mistake of removing the doors first. **Don't do that!** Because you are using more force on the sprue, you may (will) break another part. I broke the handles off the door guides and one of my small handles flew who knows where in two pieces. OK, we'll fix that in a minute.

Remove the smaller pieces first and use a new No. 11 blade. Sprue cutters are too large for this. Take it slow as these things love to go airborne.

For the doors, and again, do the other parts first, gently score the piece holding door to the sprue. Then using a bit more pressure, do that again and again. You can see the picture to the left my score lines. Once the door comes free, use the emery board to clean away leftover flash. Test fit to the body to make sure the door will lay flat, but do not install at this time. Note, the doors may have a little warp but we'll take care of that when they are glued to the body. These doors DO NOT open and close. Now because I removed the doors first, don't do that, you can see in the picture above right, in the blue circle, the the two handles broke off the door guides and I lost a small handle.

After a few deep breaths I continued and added the door guides on the door bottoms. The picture on the following page will show how I glued the handles back on. Since the handle lays on the door, I simply put a small amount of glue on the back of the handle and buttered the broken pieces together. You really have to be close to see the repair, and after a light weathering job, it will disappear. Now the small handle... I used brass wire .025 and bent it into shape. I darkened it and installed. You may want to use wire for all of these door







Completed doors and basic roof.



The O Scale Resource January/February 2018

handles, but since they are so close to the door, they don't usually receive and damage from handling. Matching the paint is suspect as these cars were modeled in the color they are which is why we can glue without scraping. If you look at both doors on the bottom of the previous page, you will see the original and my wire replacement. Again, weathering will hide the differences. The door latch will be added later as will the tack boards which are on the details sprue.

Underframe and Details



On the test fit, make sure the ribs do not push out the car body at the points circled above. If they do, gently file the ends.

First we'll remove the underframe and the four cross members from the sprue. These are very hardy, but go slowly. The couple pockets you can leave for now. Once the underframe is off, lightly sand the ends and don't forget to remove the little section in the center.

Test fit the underframe on the car body. There is a "B" end that must point toward the brake end of the car, but we'll get that later. For now, make sure the ribs fit inside the car body and gently file as needed.

Now working with the four crossmembers, sand them smooth on the ends where they came off the sprue. These fit nicely in the cut outs of the underframe.

Note: make sure the open side of the crossmembers faces the end of the car. See picture on left. Test fit again and make sure the crossmembers don't push out the car sides. If so, file gently. Now with the open side of the crossmembers facing the end of the car (or the smooth side facing the center of the car) glue these in place.

We will set this aside for now. **Do not glue this to the carbody yet.** The lines cannot be installed if you do.

Now comes the fun part, we need to remove all the brake systems and lines from their sprue. This will be the worst part of the exercise. Put a new blade in your knife and let's start. It's best to start with the most fragile parts first. Using the picture below for reference, the yellow brake line and the red assembly with the valve and clevis assembly is where I started.

Left: Completed underframe with crossmembers. The open side (non smooth side) of the crossmembers face the end of the car.

Below: All the parts for the underbody color coded for clarity.





Cut as close to the line as you can, starting with the smallest connections holding to the sprue. If you break a line don't worry

too much as you can butt them together and noone will see the fix.

Once those are removed go, to the blue parts, air hoses, brake chain and small airline. Watch the thickness of the sprue to make sure you are not cutting a placement pin. They will be thicker. The green air tank is next, and then the purple pieces can be removed. This system has worked for me, but you can do it your way if wanted.

The picture on the next page shows all the parts removed. I got lucky and did not break anything.





Above: All parts removed. Notice they need to be cleaned up a bit. I would rather be close without going into the part with the knife.

Left: Using a new blade, we can now get closer to the part and remove the extra sprue. You could use a small file, but be very careful because if the file catches, you could bend and brake the part.

Remember I said the underframe needed to placed properly. There is a pin on the underframe which represents the

brake end of the car. There is a receiving pin on the car body as shown in the picture (above left) with the yellow circles. When we install this, remember the orientation.



Above shows the parts cleaned and ready for install.

After cleaning the parts as best as we can, it's time to put this underbody together. The long air line is installed in the underframe. The long end is inserted through the holes in the crossmembers as shown below.



Then you have room to pull the air line back through the crossmembers holes on the other end. Note that the underframe has cutouts for the bend to fit in. If somehow you put this in backwards, the bend will not fit the frame.



The O Scale Resource January/February 2018

Once this is completed, you may glue this assembly to the underbody of the car remembering the brake end. Make sure the underframe sits flush with the car body. Push on the two bolster ends as they will sometimes snap in place as shown in yellow below. Also, and I have had this problem just a few times, the center car body where it was removed from the sprue sometimes sticks up too far not allowing the assembly to sit flush. (Red circle) If this is your case, carefully sand it down.



Next we'll glue the air tank to it's mount. The ends of the tank may need to be lightly sanded to make a good fit on the mount. The tank ends are keyed so it will only fit the mount one way. Next, mount the triple valve to it's mount. Note the picture at the bottom. The mount has a longer leg on one side and that is the way





so it could be attached either way. The show leg will face the outside of the car body.

the triple valve valves need to point. It's not keyed

These assemblies may now be glued in place. The two lines from the air tank slip into the two bottom holes of the triple valve.



The O Scale Resource January/February 2018

You may notice some "glue slop" near the air tank. Well, stuff happens! I was not careful enough. Now no one will see this, and in my case, I'll be spraying the underbody anyway with a flat grimy black so that will disappear.

Now we can add the the large air cylinder and line assembly. The pictures below shows the orientation of this install. The yellow circles are pins on the part and where they attach, with the clevis being the largest. The white circle shows the connection to the triple valve. The red circle shows the brake line that is simply glued to the bolster.



Lastly, the green circles show the three brake rib brackets installed in their respective holes.

Almost finished... there is a small airline/filter that mounts between the airline and triple valve. This is a fun one because of its size. The picture on top of the next page show this part installed. There is a small fitting on the airline that this parts fits on and then the filter end goes to the last hole in the triple valve.

The last three pieces are easy, the two air hose couplings, one on each end of the car, and the brake bell crank on the brake end. See the pictures on the next page for placement.



Close up of the small air filter part from the air line to the triple valve.



The picture on left shows the brake hose mounted. There is a small hole in the bolster that the hose fits into, and a small hole on the end of the car for the coupling end. The brake end is the same. The picture on the right shows the mounting for the bell crank. The line end simply butts up against the other air line sitting on the bolster.



The bottom picture show the completed underframe. If you are still with us, the worst is over! The instruction sheet covers all this in a simple paragraph, and here we took seven pages to try and help with ambiguous questions from the instructions. This may be overkill, but if it helps you, it's worth it.



I found a very nice brake drawing and have included it at the end of this article. I want to cover two more items with the underframe and the trucks. I want to do the trucks so we can get the car upright without breaking anything on the bottom. Let's do the couplers first.

The kit includes coupler pockets, and if you want to use those, remove them from the sprue and clean them up. I have never used them, instead I use standard Kadee® 805 pocket and couplers. You could also use the new AAR Type "E" Couplers, but here I'll use the old standard.



Top right: The dimpled hole is where the included coupler pocket will fit. If you use that, simply add a coupler of your choice and glue. In my case, I have always used a standard Kadee® 805. We need to make a small modification if you decide to use this.

Top right: We need to drill out this hole and thread for a 2/56 screw. If you don't have a small tap set, it's worth having and they don't cost that much.

Bottom: We need a .040 shim for the Kadee® 805 pocket. Using scrap styrene, cut a piece that will fit in the bottom of the Kadee® cover as shown. Then drill a hole through the styrene. I used a No. 44 drill.





The O Scale Resource January/February 2018



Top: here is the completed assembly with shim. You can glue the shim to the bottom of the car if you plan to paint the underframe. If not, paint the shim black to blend in with the with coupler pocket.

It's possible you may be able to skip this shim by using Medium Underset Shank that Kadee® now makes. There may be better way of doing this, but all my cars have held up without any problems.

Below: With the shim in place, the coupler matches the height guide.



The O Scale Resource January/February 2018

Trucks

Many people had issues with these. I think they are by far the best plastic truck of their type out there. The parts are below. I have a confession, I have never used the pads (green for reference in photo below). The instructions don't mention them, so I never used them.



There are a few ways to assemble these. I'll follow the instructions so you can see how easy it really is without getting confused. Lay the side frames out and the bolster as shown below. Insert the bolster into each side frame going through the larger opening and sliding down into position.





1) With the bolster in the sideframes, use the supplied screw to attach to a piece of wood and tighten down making the sure the axle recesses are facing to the inside. This just helps to hold everything in place. You can also do this with your hands as I normally do, but this makes it easier.



2) Now push the spring pan through the upper opening of the sideframe.



3) Push the spring pan all the way through the left sideframe.



4) Spring pan installed. Now we need to install the spring/brake shoes on each side.



5) Taking a pencil, push it through the spring pan and the bolster. The spring pan is very flexible so you will not break it. The spring/brake shoe assembly will be inserted with the small holes up and facing in on each side.



6) Push the brake shoe through the assembly close to the pencil and then slide to the sideframe.



7) I overexposed this picture to better show the holes in the brake shoe assembly. The top one has been inserted near the pencil and pushed back toward the sideframe.

Now do the same with the other brake shoe assembly.



8) Once the brake shoes have been pushed against the sideframes you can pull out the pencil and remove the screw. This whole assembly will be locked together.



9) The kit comes with two types of outer springs and two journal cover doors. Use the ones you want.



The O Scale Resource January/February 2018



10) The outside springs simply push into their respective holes in the assembly, as do the journal covers.



11) Now the brake hangers are installed into the holes on the brake shoe assembly.



We are finished!!! Well, almost. I like to run so I don't use the ones supplied with the kits. I have used NorthWest Short Line wheel sets, and now you can find packages of InterMountain metal wheel sets at shows and on-line for around \$7.00 a set. That's what I am using here. The supplied wheel sets make nice loads or area details once you sand off the pointed axle, but don't work if you like to run.



I decided to paint the underbody a flat grimy black to get rid of the shiny parts. Notice the coupler shims for the Kadee® couplers have been attached. I used Scalecoat II Grime #2, but the color is up to you. I thinned 50% with Scalecoat II thinner. A rattle can would work just as well for something like this. Since this was an easy masking job, I did not use the more expensive Tamiya tape, just Green Frog tape.



Underbody painted and ready for the next step in the build. If you want to weather this now, go ahead or wait until you finish the car.

Outside Details

Now we are on to the outside details. The sprue is shown below. The blue parts (color coded for clarity) are the only real "I have to be careful" parts on the sprue. Again, use a new knife blade and go to it. Also, now you



have a selection of three brake wheels. Use the one for the car you are building and put the others in the scrap box.

Place your parts first and make sure the holes are large enough to accept the pins on the part. If there is binding, I use the tip on my knife and ream the hole just a bit. Once the parts fit, we can continue.





First I attached the grabs on the right side of the car. (See picture at bottom of the previous page.) There are extras of these in case you break one. Because the holes for these are offset, it's almost impossible to use wire without filling one hole and drilling another. The ladder on the right side was next. The steps are shown in the bottom image on the previous page... I glued them in place along with the ladder, but I would now advise holding off on those as you will probably pop one off as you work on the car.

The non brake end (Photo 1) has a ladder, a grab and two steps. Again, check your holes with the parts to be sure they line up and fit. Using a glue applicator I add the MEK to the pins on the part and then quickly attach into the holes of the body. MEK evaporates much quicker than the normal model glue.

On the brake end, I started with the retainer valve and pipe and the large grab. (Photo 2) Next the brake wheel. Remember there are three



different wheels included in the kit depending on the era or whatever you like The brake wheel was attached to the mounting assembly and then attached to the car making sure the bottom of this piece fit between the brake lever sticking out from the bottom of the car. (Photo 3) Note some paint spray on the bottom end appears in Photo 1 and 2. A quick dab with MEK removed it without damaging the car's paint.

Next the brake platform supports and the platform were added along with the bottom steps. (Photo 4)

Last, in photo 5 the ladder was added.

Now you can add the four corner steps that I already added and knocked off a few times.

The doors were then glued in place. Decide if you want them closed or open. Because the doors in my kit would bow out when in place, I held the doors in

The O Scale Resource January/February 2018



place against the body and applied MEK to the inside of the door and body. Give it a minute to set up and you are good to go.

Back to the roof, apply the correct had grabs to the opposite corners. There are two sets of these and only one set will fit your roof. The picture on right shows one attached and the other on the bench next to it.

The car needs to be weighted. There are many ways of doing this. I bought a box of ½ ounce weights years ago and still have them. This is what I weighted all my InterMountain cars with and they also work well with all my other cars.





The pictures above show the weights laid out on the bench and then installed in the car. This gives us 9 oz of weight along with the car itself and metal wheel sets, and has proven to work without any problems on my layout.

The picture on the left shows the coupler mounted. Be careful when turning the car upside down that you don't break the brake wheel which sticks up over the top of the car.

The last step is to glue the roof in place and you are finished. You will end up with a beautiful car for very little money and a good learning experience. Hopefully, you will begin to see the joy in building and move on to other kits, new and old.

If you are really ambitious, or in P48, there are many extra details and much more you can do to this car to make it even better or follow the prototype closer. But that's for another day.

The O Scale Resource January/February 2018

I hope you enjoyed this article. I realize that 24 pages from a 2 page instruction sheet may be over kill, but I wanted to go through each step, show the problems you may encounter and how to fix things that don't go right.

It's time we as modelers get back to, well, modeling and building.

There are so many great kits at shows going for very little money. It's worth picking a few up and enjoying the build.

If you like this type of article let me know, daniel@modelrailroadresource.com, and I'll do some more using wood kits, resin and brass. Also if you missed it, don't forget to see my Thomas tank car build in the September/October issue of The O Scale Resource.







The drawing above is a great illustration of a type AB type system. Many kits don't give you any idea of the parts you may need to buy extra and if they are included, assume you know what goes where. The actual placement of these parts will vary from car type. If you want a great resource **Wabtec Corporation** has a PDF with about all the brake information you will ever need as a modeler.

Copyright Wabtec Corporation used with permission







THE COUNTRY CROSSING A PLAN FOR A SPECIFIC SCENE

By Pete Mottershead <u>fmcdonald1856@gmail.com</u> <u>http://www.specialtytrackservices.com</u>



The Main Track Plan

The Country Crossing Track Plan is for the modeler looking to reproduce certain specific scenes rather than a prototype or even a freelance railroad. In this particular case, we are depicting RR scenes held together by a common theme. That theme is somewhat laid back, rural in nature with lots of trees, a river, and structures that would be found away from the density of a modern city. 15 feet by nearly 42 feet is a good size piece of model railroad real estate. There are additional parts to this article. We will offer a suggestion showing how to build the bench work. Finally, we will take a moment or two and talk about a real life version of the Country Crossing that exists today. At the very, very end, we will complete the curved crossover begun in "The Industrial RR" the November/December 2017 issue of *The O Scale Resource*.



I suspect there are folks out there with fond memories of events that can much more easily be portrayed in a handful of unrelated but realistic railroad scenes, rather than trying to tie an entire prototype or railroad into one basement and feeling compelled to include scenes without any meaning just because they 'should' fit. The Country Crossing is a collection of scenes independent of one another; yet each one is pleasant to the owner's eye complete with locations that spawn a certain level of excitement every time they are looked at. In this case, the center of attention is the crossing. A two track over one 45 degree pair of diamonds. The double track represents the first railroad to advance to this location. The single track is the lesser road that came along at a later date and as a result of this country's inheritance of English laws and procedures, is responsible for maintaining the crossing. Tower, rails, signs, signals, you name it.

The plan itself, in addition to featuring a crossing, allows for consists to pass through and out of the crossing scene without continually looping like a poor figure 8. Each train has a place to go, and a place it came from. When two (or more) trains are visible it's what the prototype would have done so under that same circumstance.

Since rail crossings are one of the most difficult scenes to depict in model RR form, some (actually a LOT) of exceptions have to be made. Having a train run through the crossing then almost immediately have it come right back again on the other leg in a short loop is a little too toy like for most of us. Fake crossings that go nowhere are easily detailed, but just don't convey the feeling of something actually happening because nothing is happening. The operator cannot bring a consist up to the crossing and wait while a higher priority train runs through the diamonds. Unless you have about 1500 sq ft there just is no way to pull this off realistically. But..., we can give a good illusion of two independent lines. In this case, we have enough main line on all four sides of the crossing to allow train 2 to pull up and wait, while train 1 crosses and then 'disappears' out of sight. To make the crossing even more valid, the design allows us to actually stop a train ON the crossing while passengers and small shipments of freight (like milk) are loaded and unloaded. Also, should the spirit move, this is a classic interlocking. Interlocking's demand signals. It is perfectly prototypical to signal a junction and nothing else. In other words, you could build the masts, bridges, signals, etc., and not feel compelled to signal the entire road. That would be a lot of lights in one location. Cool!

Just what does this plan represent? A small rural RR and a larger faster one with a single connection to an urban destination. There are small businesses along the right of way just waiting to be detailed. The route is a continuous run with reversing tracks in each direction on the smaller RR and a unsceniced terminal area. Many O Scalers do enjoy a true 'fiddle' area. The tracks along the wall provide for something less than pure, by the book, no hands operation so they can get their trains out on the main without a lot of fuss. No hidden track. Behind the trees maybe, but for sure not covered. More than your average O Scale amount of scenery. Lots of trees. I prefer a 'filtered' view block. The viewer can see movement behind the filtering but still his view is forced towards the scene in front of him. Some clever track work, but not much. There is a call for a 60"/84" RH curved turnout from O Scale Turnouts and the diamonds are Atlas.

Priority: largest possible minimum mainline radius – 54"r - given the width of room, specific size of aisles, AND what we want to accomplish with the plan. In other words, if the room was 16' instead of 15' 5" where would the 7" go? Aisles, radius, more room at edge of return loops, etc. In our case, we would add 3" to the outer track's radii.

With town names like Blarney, there just HAD to be a stone factory. (It's in Ireland. The deal is if you kiss it, you will have eternal eloquence and gift of gab OR you will develop track plans).

Specific Scenes

Grady's Grunions - This is the main attraction; set scary close to both tracks at the crossing. It's cool when a consist stops at the crossing for whatever reason. But it's awesome when a fast freight blows through at 50 slamming those frogs with their steady cadence. Slamming is the word, too. Sort of an organized violence that allows those taken with the spectacle to stand close and feel the force more than see it.



Quentin's Corners – Just a small rural industrial area where trucks and railcars exchange merchandise, grain, seed, and other commodities associated with farms and fields.



Section house – Bunks, kitchen and a tool house. These only occur when the workers are well away from civilization. Our example is indeed far from the everyday action.



So what if you actually wanted to build something like this?



For years you have longed for the space. Basement, game room, attic, anything. You've built rolling stock and structures in your apartment or condo. Stocked up on engines that have never run – you don't even know how far they will roll. Then the day comes: You have the space – Hallelujah! Great day in the mornin'. Then as you stand and gaze at the spot you have acquired it hits you for the first time: How in the world are you going to build all that bench work? I mean the space you wanted: there sure is a lot of it. Where do you start? Last time in "The Industrial RR" we talked about starting small and expanding piece by piece. This time, we do it all at once. Take a look at figure 'Bench Work' (Above) and 'Bench Work with Fill' (Next Page).

The O Scale Resource January/February 2018

Check out the note all the way to the right: 20 - 2 foot by 4 foot benches - identical. In other words, you or someone, has to build 20 of these things. You could contract that out. If you aren't overloaded with experience, I can assure you that you will be by the third or fourth table. The reason for this approach is, when you have the luxury of this kind of space that is open and free of obstructions, it will be much easier to get on with your project rather than to custom build each table.



Do you need a plan? Yes, one like this will do – **the common denominator is the fascia**. All the track work is inside the fascia – as is is all the bench work, so you can use that fascia as a boundary. After you have completed the 20 tables, put them where your diagram tells you. If a corner of a bench is so many feet from a wall and so many feet from the adjacent wall, make that measurement and plant your bench there. (Don't secure to the floor – you will have much greater need to move than to worry about stability). Believe me, when built correctly and secured to one another, these things aren't going anywhere.

Now move on to figure "Bench Work with Fill". Here is where you will use loose pieces of 1 x 4 and your new found carpentry skills to connect the tables and 'fill' areas left open by odd spacing of tables where the fascia didn't allow enough room. The main reason for using the fascia as a boundary is, it keeps the bench work from overstepping into the aisles. You won't have a giant plan laying on the floor to make sure everything is in the right place. You use your map (bench work plan) and tape measure to do your navigating.

Here are a few general rules about the fill: a 1 x 4 is good (safely good) for about 4' of load. If you have to span more than that, double it and screw the two pieces together with two screws every foot. In other words, laminate them. (One experience I had, I bought screws in boxes of 100. When the box was used up, I threw it in a 5 gallon bucket. As I neared the end I counted the little boxes: 20. 2000 screws? It just seemed impossible, but that is indeed a real number).

Your access area should be framed as separate components then suspended between benches and/or other fill. Building these frames will assure you don't compress yourself later on. Also, make sure in your table spacing you leave a path to your access points. The switching area along the wall should be built first. The idea is to get some track and electrical down so you can run a train before getting embroiled in wood. I mean, that's why we are here.

The Real Thing

Selma-Smithfield, North Carolina. When I first began visiting here several years ago, the stationmaster told me quite a few people gather trackside in the evening to just sit, talk and watch trains. Many bring their own chairs. The station itself closes at 5:00 p.m. and the gatherings begin after dinner. The scene is reminiscent of years and decades gone by. The freights don't stop of course, but there is some passenger activity. Can't buy a ticket, but you can get on and off. It's fun to watch the North Carolina Railroad and Amtrak attendants help the passengers and work with the stationmaster. They are trying to keep a schedule and move quickly, but always kind, courteous and joking back and forth.

If you should happen to be motoring down I 95 in the Eastern end of NC, look for exit 98. Get off and go West on Anderson Avenue. In very short order, you cross the double track CSX main. Look to the left, you cannot miss it. You will find a refreshing, laid back Country Crossing.



The O Scale Resource January/February 2018



Picking up from Last Issue

At the conclusion of the main article in the November/December 2017 issue of *The O Scale Resource* we showed how to align a curved crossover. That crossover consisted of a normal #6LH code 125 turnout. Still to be built was the #7 curved RH code 148 turnout. Here are a few photos showing how that crossover was completed. What made this a little more challenging was the change in elevation from the so called main or secondary main down to the actual yard tracks in a very short distance.



Curved Alignment Original



Curved Crossover Point to Point



Curved Crossover Completed



Curved Alignment Smooth

Good Luck and Happy Modeling! Pete Mottershead <u>fmcdonald1856@gmail.com</u> <u>http://www.specialtytrackservices.com</u>
A REBIRTHING OPERATION: CONVERTING NARROW GAUGE CARS TO STANDARD GAUGE TRACTION CARS By George Paxon

For almost forty years I was a serious narrow gauger. I always had a latent interest in traction, and over the years, collected the obligatory assortment of kits, parts, and a few pieces of brass with the honourable intent to add some traction to my large On3 layout when time permitted. I had built some traction kits along the way and painted some brass imports. Well, the plan was all going just fine until the wife decided we needed to move to a new house. After recovering from my bout of depression, and running out of arguments as to why we should not move, I began the sad task of dismantling my On3 layout, the results of over 12 years of work. The old layout occupied a large purpose-built room on the top story of the house. The On3 layout had not been built with any thought of moving and would be a total loss. Much time was spent carefully removing the many scratch and kit built buildings wrapping and boxing them as well as the rolling stock. To keep my spirits up, the mind moved on to thoughts of a new layout in new quarters at the new address. My first plan was to rebuild my On3 empire with some traction tossed in for good measure. As I recall, I was lugging a load of old layout materials to the dump in my ute (that's Aussie for pickup truck) when it happened: I was seriously bitten by the traction bug! So plans were changed, and I started conjuring up ideas for a new traction only layout.

Nine years have passed since. We are in our new home, and I built a large barn with a fully lined room for the new layout which is slowly coming along. I have busied myself building traction passenger and freight equipment for the new layout and progress on the layout has, as a result, been somewhat retarded. All my On3 equipment, in their boxes, is neatly stored on shelves built into the new layout benchwork. Every now and then I have wondered what will happen to my accumulation of On3 locos and cars. One night, while moving the On3 boxes to pull some wires under the layout, a thought occurred to me that I might be able to re-use some of the On3 equipment. Many traction systems, after all, were much like narrow gauge: down on their luck, operating on a shoestring, surviving on modest traffic, and making do with whatever they had on hand. For both, tin can and bailing wire maintenance and a new coat of paint were the primary tasks in keeping equipment in useable condition. I grew up along Pittsburgh Railways, the traction line in the area, and most of their equipment looked like it had been through the war and lost! Many of us flocked to narrow gauge modeling because of the rundown, well weathered look of equipment and facilities. Why I missed these features on traction is beyond my current understanding, but I have finally seen the light.

On my Mountain Electric Railway, a rebirthing operation has now been undertaken to convert some of the On3 equipment to traction. When you think about it, both narrow gauge and traction equipment are narrower than standard gauge and of lighter construction.

After some thought and study, it appeared to me that some cars would be dead easy to convert, others would require substantial work to make them useful, and some were hopeless for conversion. As a general consideration, good candidates are cars that are at least 8 feet wide and at least 36 feet long. I don't think too many short, 30 foot and less, freight cars would look plausible. There were some short traction freight cars, but they were not all that common. A few short gons and flats can work nicely in work car service, however. A short box car could serve as a tool car trailer. My thoughts are that too many short cars, particularly in revenue service, will yield a toy-like look to the operation. Many traction lines used obsolete passenger cars for work cars, either as is or re-built, so there was a limited number of freight looking cars on many traction systems.

I think the first step is to determine where such converted cars will operate on your layout and then determine what changes will be required. I have a freight bypass around tight city street corners and won't need to pull all freight cars around the street radii. Therefore, I only need to add radial couplers selectively to such converted cars that will need to operate in city streets. Some of my old narrow gauge cars will be converted into traction trailers and will need to accommodate street trackage. Other cars should be able to get by with standard couplers.

Narrow gauge passenger cars do not appear, at least to me, to be good conversion candidates since they lack the rounded ends typical of traction passenger cars. Mechanically they could probably be made to work to some extent, but they just would not look the part. If desperate, you might be able to use one for a trailer car behind a powered traction passenger car, but two such narrow gauge cars together will probably not make it around a street curve which passenger cars have a habit of traversing. Some traction lines with very broad curves did purchase used steam road passenger cars and used them, so the precedence is there if you are so inclined.

Common changes include moving bolsters toward the car center to provide more room for longer wheelbase trucks and to clear couplers if radial; adjusting height of bolsters to accommodate larger wheels and allow car to ride higher per traction style; removing narrow gauge couplers and installing radial couplers or standard gauge couplers in coupler pockets; adjusting truss rods to clear new trucks; and dealing with interference between trucks and corner steps.

By moving the bolsters inward, you can often get the trucks to swing inside the corner steps. Some traction freight cars had two rung steps due to their high riding position, while narrow gauge cars had short single rung steps. I look the other way and stay with the short stirrup steps if they clear the trucks. But, if stirrup steps need to be changed, I suggest going to a longer or two rung step which looks more prototypical. Due to the need for considerable truck swing on cars with radial couplers, sometimes the short stirrup steps do work out well as the trucks can swing under them. This I see as a reasonable compromise.

I have added new bolsters inside the old narrow gauge ones to minimize the surgery needed for conversion. For new bolsters I have been built up some from styrene, used Northeastern wood ones, and used the cast plastic standard gauge ones by Precision Scale Company (PSC). For traction use, the 5/16 inch high bolster works out quite well. On the PSC bolsters, the anti-wobble pads restrict truck swing and require some cutting and filing if the cars are to have radial couplers.

Tank Cars. Many prototype narrow gauge tank cars were smaller old standard gauge cars that had been modified for use with narrow gauge trucks and couplers. Some of these are good candidates for conversion if you can get enough coupler swing for your curves and if the trucks will clear the frames. Most of these cars are short which will reduce needed coupler swing, but of course they won't accommodate street radii with standard couplers. I doubt many traction lines attempted to pull cars of gasoline and oil through city streets anyhow, so that is not much of a problem.

The frameless tanks (Van Dyke cars) used on the D&RGW, commonly referred to as the Gramps cars, which were 1900 era standard gauge tank cars originally, can be made to work. I found the brass tanks from PFM to be easier to convert than the Grandt Line styrene kits. The Grandt Line cars are so close to scale dimensions that the truck swing is limited by the side ladders when standard gauge trucks are fitted. These frameless tank cars are actually offered as ready-to-run standard gauge cars as well as narrow gauge cars by San Juan.

Other narrow gauge tank cars that were basically standard tanks on narrow gauge flat cars are easily converted to traction use by building new flat cars if nothing else. Usually you only need to rework the bolsters and install standard gauge couplers.

Photos 1 through 4 show several converted tanks. Photo 1 is a PFM brass Van Dyke tank converted and before painting. You might notice the different trucks. The photo was taken while I was experimenting to see which trucks would best clear the side ladders. Photo 2 is a very old Scale Railway Equipment Company resin cast model of a Maine two foot tank that I had built the flat car for many years ago, and it was used on my On3 layout. It converted easily with just new bolsters, trucks and couplers. Photo 3 is a brass CONX 5 tank on a scratch built flat. It, too, ran as pictured on narrow gauge trucks for many years on the old layout. And, Photo 4 is a resin cast tank for a Aussie 2'6" gauge "gin"(as we call water cars down here) that once ran on the famous Puffing Billy line down here. I just scratch built a flat for under the tank. This little tank car has link and pin couplers as it is intended to be pulled by a small four wheel sprinkler when I get around to building the sprinkler.







After studying the photos and drawings of the early narrow frame standard gauge cars, I suspect that in converting them to narrow gauge, the frames were widened rather than narrowed further. This makes the narrow to standard gauge conversion difficult as truck swing, when equipped with standard gauge trucks, is very limited. On preliminary consideration, this appears to rule out converting the steel framed tank cars I have that are models of Conoco and Texaco cars used on the D&RGW and C&S systems.

I am also in the process of building narrow standard gauge frames for several Grandt Line tanks to model these early tanks cars. When done, I should have a few nice cars such as the prototype UTLX 12283 shown in Photo 5. This photo was provided by Jeffrey Lentz, Office Manager at the Mid-Continent Railway Historical Society and used with permission.

The Westside Lumber Company and other coffin shaped tanks will convert into nice maintenance tank cars. I do have a long brass model of a Westside coffin tank car in revenue use for road oil service.



This photo was provided by Jeffrey Lentz, Office Manager at the Mid-Continent Railway Historical Society and used with permission.

A major issue in converting tank cars seems to be obtaining sufficient truck swing and getting enough clearance between car ladders and the trucks. I worked out that Fox trucks, without bolsters and springs in the center, provide more clearance potential than arch bar trucks. These are an interesting truck design that dates from the 1890s that was once popular until car weight began to increase. Roads like the New York Central, Philadelphia and Reading and others, bought these trucks in great numbers. Some of these trucks were obviously handed down, as were arch bars, over the years and used for the lighter traction equipment. I have several photos of traction cars with Fox trucks. I had been waiting for quite some time for Rich Yoder (RY Models) to offer the Fox trucks he has promised for some years now. Tired of waiting, I drew the trucks and had them 3D printed for use on the tank cars to get the extra clearance needed. Rich has now imported his Fox trucks. Always happens: when you make something from scratch someone comes out with it in a kit or brass. But Rich's Fox trucks are very nice and I have bought some. You should definitely look at these if you are a period modeler as they are very good ones.

D&RGW Flat Cars: I had scratch built at least one of each series of narrow gauge flats and was eager to convert them. The 6000 series were only 30 feet long, narrow, and proved to be poor candidates from my point of view. The D&RGW 6200 flats rode high and would make adding radial couplers easy and they are 36 foot long. Mine would probably have converted nicely, but in my zeal to exit narrow gauge, I sold it to a friend. The D&RGW 6300 flat cars were 40 footers, a good width, but rode very low on their trucks and were converted with the addition of new bolsters, trucks and couplers. D&RGW 6400, and 6600 series cars were once standard gauge cars of 36 foot length and can easily be converted. These are a bit wide for my standard clearances (which were established assuming maximum car dimension of 55 foot length and 8 foot 6 inch width), so they might not work for street running even if radials were installed. But, they will operate over my freight bypass using standard Kadee couplers. My 6500 series flat, in the prototype world an old rebuilt and cut down 42 foot standard gauge gondola, also only needed a higher bolster and new trucks and couplers to make it workable. I also had to change the coupler mounting arrangement with shims to get correct coupler height. Some keen reader with narrow gauge knowledge may notice that in Photo 6, my converted flat cars still carry the numbers used in narrow gauge service. This is a minor issue and avoids the need to repaint the cars. Only a handful of nit-picking narrow gaugers would spot this abnormality. The issue would pass right over the head of most traction types.

The O Scale Resource January/February 2018



D&RGW 40 Foot Reefers: These are good conversion candidates. I have a few that I built many years ago from scratch. I wanted to use these as refrigerated freight trailers for fruit, vegetable, and milk service on my Mountain Electric so I added radial couplers. The ends needed some rework to cover the notch in the end sheathing where the narrow gauge coupler came through. By adding a large wood block as a buffer block to the end sill, the shape of the car end approximates the radial coupler swing and becomes most useful. Higher bolsters were added toward the car centres. I still have a San Juan kit of the 40 foot reefer, and will build it up for use as a traction freight trailer as well one of these days. One of my scratch built cars had been dropped during operations and damaged while in narrow gauge service. So, during the conversion I made repairs, replaced a ladder, and then repainted the cars for ME operations. Photo 7 below shows the after re-birthing, while photo 8 on the next page shows a reefer during re-birthing.



The O Scale Resource January/February 2018



D&RGW Gons: The700 and 800 series drop bottom gons used by the D&RGW are very nice cars and available as an excellent Grandt Line kit. Photo 9 shows one of these cars as it was intended to look in narrow gauge service. By adding radial end extensions to the end sills, these otherwise 32 foot cars can be modified to look longer, approximately 37 feet, and will fit in quite nicely as revenue freight cars.

To convert my car, I removed the On3 trucks and couplers and then removed all the detail from the end sill, which on this car, is a steel channel. The coupler pocket, bottom bracket for the brake wheel shaft, and coupler lift bar were carefully cut away with a nice sharp hobby knife. The outside face of the end sill was sanded smooth to include the removal of all paint. Bare styrene there will facilitate the gluing of the new radial



The O Scale Resource January/February 2018

end to the end sill. I also removed the top brake shaft bracket from the car end but left the retainer valve in place.

FIGURE 1

DETAILS ON BUILDING RADIAL ENDS FOR GON



NOTE: ADD STYRENE NUT-BOLT-WASHER CASTING
IN EIGHT PLACES AS SHOWN BY ()

I made up the new radial end platforms as per the sketch in Figure 1 from styrene strip and sheet. And a photo of the new ends before installation on the gon is at Photo 10. The tongue is important. This is the bit on the bottom radial former that extends back from the end. It will be glued and screwed to the coupler mounting block on the gon to ensure a solid mount for the new car end. This will make sure your loco can't snatch the



new end from the gon during some exuberant switching. I did not want to rely solely on the glue joint between the new end and the existing end sill. This idea proved valid as while removing the detail from one end sill, it fell off the car since it was only attached by a narrow glue line at the top back side of the end sill

The O Scale Resource January/February 2018

anyhow. Be sure to doll up your radial end platforms with nut-bolt-washers castings, a buffer block of steel plate, and grab irons. All such details add a lot to the look of model cars. I installed the brake wheel, brake staff, and ratchet and pawl that had been removed from the car earlier. I drilled a vertical hole in one of the radial end platforms making sure the brake wheel would clear the end of the gon. The hole should line up with the brake rod from the end of the brake cylinder.

I installed radial couplers on my drop bottom gon to insure it could operate anywhere on the Mountain Electric to include street trackage. The radials are my own design, cast is brass, and take the new Kadee 700 series automatic couplers. If anyone needs radial couplers, they can be purchased from Rivers Traction. I sent the patterns for my radial couplers to Jim so that he could make them available to other modelers in the upper 50 states. There are limited choices of radial couplers at the moment. Non-working ones by Wagner were quite good, but have not been available for some time. Kemtron had working ones based on patterns made by Bill Clouser many years ago. Somewhere along the line, Precision Scale Company (PSC), which took over the Kemtron line, has managed to make these couplers just about unusable. I have purchased and used some PSC couplers but they required hours of work and much filing and fiddling to make them marginally useful. The Rivers Traction ones require only a few minutes to get them ready for the Kadees or another brand of coupler.

The standard gauge trucks I used on my gon were some Fox trucks I made while waiting for RY Models to bring out theirs. They went directly onto the narrow gauge bolsters with no issues. With the extra car length from the radial ends, the longer wheelbase is not an issue. The trick in selecting trucks for converted cars, I think, is to experiment with a few to get a pair that will provide the correct coupler height and clears any steps or other car details. I tested a pair of the new RY Fox trucks and they lifted the gon too high. Modification to the trucks would have been required to make them work on this gon. Arch bars would have been the most common trucks on such a car and would be just as appropriate.

Photo 11 shows the car converted, repainted and lettered for the Mountain Electric, and ready for traction road service. It makes a nice looking and plausible car. When first getting out of narrow gauge, I sold a few drop bottom gons to a friend and am now sorry that I don't have them to convert, also. Well, I guess I could always build a few more Grandt Line kits directly into standard gauge drop bottom gons.

I was disappointed that I could not see fit to convert the famous high side D&RGW gons. I have quite a few of them, and it would have been good to use them. But, as they are very narrow and only 30 feet long I did not think they would look the part.



East Broad Top Cars: Since I was a big fan of the EBT, I had quite a few models of EBT cars. Steel flat and box cars were 36 feet long and met the basic criteria. So far, I have converted two steel flats. One was a kit and one scratch built. Biggest task was opening up the slots in the end sills to accommodate standard gauge Kadee coupler pockets, and this was not all that much work. The new RY Models Fox trucks were screwed to the narrow gauge bolsters easily. I am pleased I could convert these as they both have nice loads on them. Photo 12 is of the converted flats, one with a reworked Lionel bulldozer as its load, and the other with gas pipes. I think they will both make nice additions to the car fleet.

The O Scale Resource January/February 2018

You might notice the significant sag in the flat carrying the dozer. The sag was quite noticeable when I first opened the kit box many years ago. My first thought was to send the bloody kit back and complain. But further study revealed the sag was quite symmetrical. I then starting thinking that I could take advantage of the



sag by adding a heavy load to the car. After all, I have been known to spend a lot of time and bother trying to get a sag into a model so why not take advantage of one already there? I had the old Lionel dozer in my scrap box and decided to use it for the load until something better could be built. Well, the dozer has been on the car for over ten years now, and is probably on its way to becoming permanent. Guess I better do some more work on the dozer to make it a bit more scale. I could add a few details such as the operating levers and doll up the paint along with adding some mud and dirt.

So far, both flats remain in EBT paint. These models were painted during construction and before the wooden decks were applied. I will probably repaint them and letter for the ME Ry eventually as EBT standard gauge flats are stretching it a bit.

Steel EBT hoppers could probably be converted. As I have steam road 34 foot long 2-bay hoppers in use on the traction line, the contrast between the two groups of hopper cars put me off trying a conversion of the smaller EBT hoppers though. This is unfortunate, as I have quite a string of the EBT two and three bay steel hoppers in brass, wood, and styrene.

I am having a serious ponder about converting a few steel EBT box cars I have on hand. The early EBT wood box cars are very short and I will pass on trying to convert them.

In my exuberance to exploit all available conversion possibilities, I have also gone through my kit repository. (I think I had hoarded enough narrow gauge kits to keep me busy building for the next seven lifetimes.) In looking through them, I have identified some that I think will make reasonable conversions.

I am planning to build a model of a traction coal motor. This was basically a powered wooden hopper with operating cabs stuck on each end. The prototype of the one I will build operated in northwestern Pennsylvania. Trucks had traction motors, and the cabs had trolley poles to collect power. This got me to thinking about the merits of a small coal train that I could use to service many of my on-line industries that needed weekly to monthly coal shipments. I identified two Manns Creek wooden coal hopper kits by Red Ball in my kit-hoard that when mounted on some four wheel standard gauge trolley trucks could make good traction models. In keeping with the home grown coal train theme, other candidates for this local coal service include a kit by Valley Car works of a Southern Pacific "A " frame gondola and a Simpson West Side Lumber Company block car kit. All these cars, to include the coal motor, have side dump features in common which would enable the cars to dump their coal loads into trackside bins, therefore adding a sense of continuity and plausibility to this operating idea.

Although these are all short cars and violate my earlier preference about keeping cars over 36 feet in length, I thought this coal train would work well for me. And, it would allow me to benefit from some more of my on-hand narrow gauge kits.

Since I have a reasonable assortment of brass tank cars with frames, I have not totally given up on converting them for use on the traction. I'm still pondering how to do it, however.

Other current plans include building the San Juan D&RGW narrow gauge pile driver kit I have in my kit hoard as a standard gauge car. I also have a narrow gauge D&RGW derrick car OP and its tender built from a Durango Press kit many years ago, and I plan to rework it for standard gauge traction use as well.

So far, I have successfully converted some brass and Grandt Line styrene tank cars as well as other miscellaneous tank cars, scratch built reefers, the Grandt Line drop bottom gon, and the EBT and D&RGW flat cars. Since many of my cars had been in narrow gauge operation for 20 to 30 years, the rebirthing gave me a chance to clean and repaint them, fix bits and pieces in need of maintenance after years of battering and handling during operations. And, I re-lettered them for my Mountain Electric where appropriate. The little crane pictured in Photo 13 was part of a kit from Vulture Models that was intended for use on standard gauge. I had originally built it up for use on my narrow gauge, so converting it back to standard gauge was not all that difficult. When the crane was converted, I ended up scratch building the attached flat car as a boom tender and water car as well as the little tool car which added quite a bit of work to that project. The three cars form a nice short work train.

These new cars have added substantially to my traction revenue and work car fleet and should, hopefully, allow me more time to work on the layout.



This rebirthing stuff is all right....I wonder what a D&RGW K-27 2-8-2 would look like with a trolley pole.....

Rockford O Scalers Open House Saturday November 4, 2017



Faces visible in the photo (left to right) are as follows: Frank McCabe. Bob Campbell, Ralph Nelson, Tyrone Johnsen, Richard Nielsen

While Amy and I went to the Cleveland O Scale Show, Glenn drove over to Rockford, Illinois for the Rockford O Scalers Open House this past November. It was a good time and a chance for all who attended to get together. Everyone got to talk about models and the latest O Scale goings on around the area. Many of us brought some show and tell for others to see. That is always fun because you have a chance to see other people's work and ask them how they did it. It's a great way to exchange modeling tips. One of the show and tell models was Ralph Nelson's scratch built GM&O motorcar. Ralph really likes motor cars and models all kinds of them. The prototype of these cars was built by Brill for the Mobile and Ohio. When the Mobile and Ohio merged with the Chicago and Alton to become the Gulf Mobile and Ohio, the motor cars roamed the whole system.

The Rockford O Scalers host a few open house events each year, and if you have a chance, be sure to go to one. The four members of the group have extensive train collections and you will surely find something of interest.

We'll have more pictures from their open house as well as layout shots in upcoming issues.



2017 Fall Spokane Train Show

Tom Dempsey from Clover House sent in a few pictures from 2017 Fall Spokane Train Show. Shown is Terry Dowler's sectional layout with Kyle Pugh running trains.







Depressed-Cen	ter 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 second
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	
Better Than Scratch! 1782 Trinity Rd Belington, WV 26250 304-823-3729 \$\$5.00 S&H in the US	









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

Amy, Daniel,

Here's the early stage photo of a Denver and Salt Lake 400 series Mikado I'm building. Got the erection drawings from the D&SLHS and scaled them to 1:48. The frame is bar stock and the superstructure is sheet brass over a skeleton frame.

Enjoy the magazine. The articles are a great incentive to get out and build something!

Sincerely, Bob Fredrickson





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 :-)

This abandoned "TY" tower in Tuscola, Illinois once protected the IC main as it crossed the UP (MP) and CSX (B&O) mains. Some people say they can still see Bob Moomaw's light on inside the tower. Bob has since passed away and the tower is long gone, but we still have our memories.

READER CLASSIFIEDS

 $BUY \sim SELL \sim TRADE$

To submit a wanted to buy or sell non business classified ad please click the link below. https://ribbonrail.com/railroadresource/Classified/ 725 Characters \$10.00 less contact information. Please read all instructions on the classified page form.

WANTED: Overland O scale Genesis Amtrak locomotive. Thomas Champley Email: thchampley@gmail.com Phone: 815-985-9277

FOR SALE: Extensive collection of Brass Engines (Steam and Diesel) over 400 units. Mfgs: Overland, Oriental Ltd, Perfections Scale Models, 3rd Rail Div, The Car Works, KTM, Glacier Park Models, MTH Electric, Precision Scale Co, Key Imports, Challenger Imports, Atlas and much more. 98% of all custom painted.

We also have a lot of miscellaneous cars (Atlas CA Zephyr, Atlas Rail cars with containers & Red Caboose) and layout scenery. I would like to get \$1200 for it.

Name: Michelle Garrigan Email: pmjlip@aol.com

WANTED: Early O scale ...earlier the better Egolf, Acme, Birch, Alexander, Crovan, Icken, Pomona, Mi-Loco O gauge and 3/8" scale , World's Fair trains, Scale Model Railways, Model Structures buildings, out side 3rd rail items, cast cars , Multi-Plex track , Hawk Switcher , Walthers Streamlined Steamer , Exacta , 30"-36" dual or triple width bridge, early catalogs , Lobaugh Mountain , etc Thank you Carey Williams 773-332-6121 wasp3245@aol.com **FOR SALE:** I am thinning out a lifetime collection and want to find good homes for mostly B&O pieces. Mint factory painted Westside Models/Samhongsa B&O EM-12 2-8-8-4. No. 7618 with crew in cab. Original box and foam--I am reluctant even to unpack it for photos, although will be happy to do so for anyone seriously interested. I have had this model for over 20 years. It seems to be in as-delivered condition. I would like to get \$1200 for it. Name: John Hankey Email: jhankey@unomaha.edu

FOR SALE: New in the box 3rd Rail SD-7. 2-rail, SP Black Widow paint. Box opened only to verify paint (did not want Tiger stripes). \$720.00. No charge for standard shipping. Scott Thurman thurmanscott971@gmail.com Phone: 214-243-6470



That's right, after many requests we will now be offering non business reader classified ads for buying and selling.

Fill out our secure on-line form here.

Please read all instructions, including magazine dates and deadlines to make sure your ad is published in the proper issue of *The O Scale Resource* or *S Scale Resource*.

The \$10.00 Basic Ad contains 725 characters less contact information. Two extra blocks of 725 characters are available for \$7.50 each. For larger ads,

please contact us. Your Email address will be linked so anyone reading can contact you at immediately while reading the ad.

CLICK HERE to place your ad today!



RESOURCE

NEWS, REVIEWS, INFORMATION TO USE

Here is now 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 www.sscaleresource.com www.indyoscaleshow.com www.sscalemidwest.com

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.

O Scale South 2018

January 13, 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: http://www.oscalesouth.com/

Email: oscalesouth@gmail.com



Chicago March Meet March, 16, 17 and 18, 2018 Weston Lombard Hotel Lombard, Illinois Email : info@marchmeet.net Web Address: marchmeet.net



16th Annual Railroad Expo April 7th, 2018 Hickory, NC One of North Carolina's premier train shows matt@tarheelpress.com www.tarheelpress.com/Trainshow



Grand River Valley RR Club Spring Train Show Saturday April 14th, 2018 HSB, Inc 5625 Burlingame Ave SW Wyoming, MI 49519 Train Show All Scales 210 vendor and display tables Vendor App and directions on website. kwskopp@gmail.com www.grandrivervalleyrrc.org



O SCALE WEST / S WEST May 24-26, 2018 Hyatt Regency Santa Clara (San Francisco area) Website: www.oscalewest.com

1st Annual Carolina Rail-Strava-Ganza

convenient to Hwy 16, 74, I277, and I 77. Only two blocks from

the Lynx Blue Line and connections to the free Charlotte Trolley!

June 23-24, 2018 The show will be in Charlotte, NC on June 23 and 24 at the Carole Hoefner Community Center located at 615 E. 6th Street. Very

> matt@tarheelpress.com www.tarheelpress.com/railstravaganza



2018 Scale O National Convention August 22-25, 2018 (Wednesday through Saturday) Rockville Hilton, 1750 Rockville Pike Rockville, Maryland Rooms will be \$109 per night plus tax. Website: 2018oscalenational.com



Indianapolis O / S Scale Midwest Show September 20-22, 2018 Wyndham Indianapolis West Website: indyoscaleshow.com Email: info@indyoscaleshow.com



RPM Chicagoland - 24th Annual "Naperville" Conference October 18-20, 2018 Sheraton Hotel and Conference Center, Lisle, IL Railroad Prototype Modelers Meet, 40+ seminars from leading presenters, vendors, layouts, meals, and more. Email: mike@rpmconference.com http://www.rpmconference.com RESOURCE CLASSIFIED LISTINGS

MANUFACTURERS	13732 Lakesi	PATE MODELS OF MARYLAND de Dr. Clarksville, MD 21029 3200 Email: NKP48@aol.com	DEALERS aboose Stop Hobbies <u>301 Main St.</u> <u>Cedar Falls, IA 50613</u> <u>Phone: 319-277-1754</u> trainguy34@mchsi.com
Prototypical looking turnouts. Made in America	hulls & fittings j www.seapo	ATS for your layout or diorama	Result Result<
Phone: 573-619-8532 Email: orders@scalefigures.com Web: scalefigures.com	Berkshirevalley	talls, more details e Valley Models models.com/apps/webstore ew other things	www.rgsrrhobbies.com
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.		o scale!	PROTOCRAFT™ 18498 Half Moon Street, Unit 203 Sonoma, CA 95476-4835 Phone: 707-935-7011
DETAILS A MUST SEE ! WWW.MODELTECHSTUDIOS.COM	Chicago "O" Scale Meet MARCH 16-18 2018 www.marchmeet.net Ph. 630-745-7600		Phone: 707-955-7011 Email: norm@protocraft.com Web: www.protocraft48.com
Advertisers Index	Scale I Septemb	ly O and S Midwest Meet er 20-22, 2018 aleshow.com	
Allegheny Scale Models All-Aboard-Trains Altoona Model Works American Scale Modes B.T.S. Berkshire Car Shop Berkshire Valley Models Chicago March Meet Clover House Crow River Products	Pg 62 Pg 88 Pg 61 Pg 62 Pg 87 Pg 62 Pg 87 Pg 5 Pg 9 Pg 87 Pg 87	JV Models Korber Models Millhouse River Stud O Scale Kings P&D Hobbies Protocraft Protocraft Rich Yoder Models Right-O-Way Railfonts.com	Pg 87 Pg 88 io Pg 61 Pg 62 Pg 5 Pg 9 Pg 88 Pg 88 Pg 88 Pg 9 Pg 87 Pg 87

Pg 62

Pg 5

Pg 99

pg

2

Railfonts.com Pg 87 Pg 88 Scale City Stevenson Preservation Lines Pg 61 Streamlined Backshop Pg 62

Des Plaines Hobbies

Indy O and S Scale Show

Golden Gate Depot

Delta Models

s, INFORMATION TO USE

SCALE





March Meet Model Contest March 17th, 2018 at the Chicago O Scale Meet

Categories

- •Diesel
- Steam
- •Passenger Cars
- •Single Structure
- •Display/Diorama
- Traction/Trolley
- •Freight Cars
- •Heavy Electric
- •Gas-powered
- •Caboose
- •Non-revenue

1. The model contest will be held Saturday, March 17th, 2018 at the Chicago O Scale Meet. Models must be entered prior to 11:00 AM on that day. Once entered in the contest, the models must remain in the contest area until 4:00 PM on Saturday, March 17th, 2018. Awards will be presented at 3:30 PM on Saturday, March 17th, 2018, and models may be picked up at that time.

2. All models will be judged by a team of judges using nationally established judging guidelines. Categories that have only one model will not be judged, and no placement will be given. In these cases, An O Scale Resource gift certificate will be awarded to the sole entrant in that category. Best of show will be a popular vote.

3. Judging will start at the judge's discretion, and will be finished by 3:30 PM on Saturday March 17th, 2018.

4. All models must be put in the display position by the modeler, and only the modeler may handle the model.

5. Any descriptions, photos, or other information relevant to your model will be attached to this entry for the duration of the contest, and will be made available to the judges at their request. The material will be returned after the contest.

6. Entrant must certify that the model entered is his/her own work., And agree to release *The O Scale Resource* magazine (the contest sponsor), Hobby Hill Inc. (the show promoter), and all persons connected with the contest from any liability due to damage or loss of the model entered.

7. Entrant also grants The Model Railroad Resource, LLC photo reproduction rights for publication of this entry in *The O Scale Resource* magazine and/or use on their Website.

Chicago O Scale Meet 2018 SCALE Model Contest

Thanks for entering the model contest at the Chicago O Scale Show on Saturday March 17th, 2018. The following pages are the Model Contest Entry Form and the Model Contest Judging Form. You may fill them out prior to coming to the show, which is recommended.

The Contest Entry Form identifies your model and is your receipt for your model. When you place your model in the contest, this form will acknowledge that you have a model in the contest. When you pick up your model, you will need to sign this form in the Claim Check area. This tells us that you have picked up your model, and it is no longer in the contest. The form also explains the rules for the contest. You will notice that there is a category for Single Structure and one for Display/Diorama. There needs to be a distinction between when a Structure model becomes a Diorama. For the purpose of this contest, a Single Structure is a stand alone building with no base. The building may have all the interior partitions and trim, but no other details. For example, a clock on a wall or a person on a platform will move the building into the Display/Diorama category. If the building is mounted on a base with scenery, that will move the building into the Display/Diorama categories should be clear. If not, contact us for help.

The Contest Judging Form will be used by the judges when looking at your model. You need to fill this out in as much detail as you would like. In addition, we would encourage you to supply more information on separate pages. Title any additional pages with the title of the judging box they apply to. For example, titling the page Construction will tell the judges that the information applies to the first box of the judging form which is titled Construction. If you supply photos or drawings, they will be used by the judges and returned to you when you pick up your model. The first box titled Construction explains how you built your model. For example, if your model is more than 90% scratch built, you would check off that the model is scratch built. In the construction techniques section, you may check off more than one item. The last item in this box is the description of how you built the model. The space is short, and we would recommend more explanation on a separate page. Make a note on the line to see the attached pages. The next box titled Detail is where you will describe the detail and what it took to create it. Again, we would recommend a separate page for your explanation. Any photos or drawings you used would be a help to show how you replicated features in your model. The next box titled Conformity is where you will describe how your model matches a prototype. If your model is entirely free lance, that is OK. Just describe how your model would match a prototype construction. Again, we would recommend a separate page. The next box titled Finish and Lettering has some items that can be checked. Check as many as apply to your model. A separate page may be required to explain all your techniques. The last box that you will need to fill out is the Scratch Built box. Describe any parts of your model that you made from scratch, along with how you made them. A separate sheet will help here as well. Any information that you can give the judges will help them to understand your model and how you built it.

The three judges will each make their own observations and assessment of your model. They will then confer with each other to give you a total score. You will get the contest judging form back with your model, and your information when you pick up your model. All decisions by the judges are final.

If you have any questions, please do not hesitate to contact us.

Amy Dawdyamy@oscaleresource.comDan Dawdydan@oscaleresource.com



Chicago O Scale Meet 2018 Contest Judging Form

Entry No.

1. Construction (Maximum 40 points)	Points Awarded
Select the construction that best describes your model Scratch built complete model and details >90% Scratch built partial model and details <90% Modified commercial model >50% modified Name of kit or commercial model used as basis if applicab	
Construction techniques–Select the methods and materials Drew own plans Followed construction arti Used proto/com plans Cut & fit metal Used kit plans Cut & fit plastic Describe how model was built, complexity, and	
materials	
2. Detail (Maximum 20 points)	Points Awarded
Describe complexity, difficulty, & quantity of detail parts	added by you. Identify commercial parts.
3. Conformity (Maximum 25 points)	Points Awarded
Describe how your model conforms to a prototype. Include	prototype documentation other than supplied with kit.
4. Finish & Lettering (Maximum 25 points)	Points Awarded
Weathered Hand Lettered Decals Trans Non weathered Describe methods and materials	
5. Scratch built (Maximum 15 points)	Points Awarded
List all parts scratch built and note special refinements.	
6. Total Points (Judges only here)	Total Points
Tabulated byVerified by	



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!





SCALE MIDWEST SHOW Come to Indy and kick off your modeling Season!

THE BEST OF O SCALE AND S SCALE IN ONE SHOW SEPTEMBER 20-22. 2018

WYNDHAM INDIANAPOLIS WEST 2544 EXECUTIVE DR. INDIANAPOLIS. IN 46241

WYNDHAM

ROOM RATE \$108.00* PER NIGHT **REFERENCE O/S** SCALE SHOW WHEN CALLING LINK TO HOTEL BOOKING GO TO: INDYOSCALESHOW.COM UNTIL 8/21/18 *BASED ON AVAILABILITY 317-248-2481 877-361-4511

DEALER SETUP THURSDAY 4PM - 9PM FRIDAY 7:30AM - 9AM

*** SHOW TIMES FRIDAY 9AM - 5PM COMPLIMENTARY HORS D'OEUVRES AND CASH BAR 5PM - 6:30PM

BUY/SELL/TRADE MODELING CLINICS MODULAR LAYOUTS LAYOUT TOURS

\$

NEW ONES FRIENDS ΜΕΕΤ OLD AND ΜΑΚΕ

SATURDAY 9AM - 2PM

Please print clearly – Detach and re

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:

eturn lower portion with payment	
Registration (Both days included) \$25.00 (Table holders must pay the \$25.00 registration fee)	\$25.00
# Of 8 ft. Tables \$50.00 ea/\$60 after 8/1/18	\$
O Scale vendor 🔿 S Scale vendor 🔿 No preference	\bigcirc
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)	
(NO Charge/only needed if altenuing snow)	

TOTAL AMOUNT ENCLOSED:

(No refunds after 8/1/18)

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 2018 or in connection with any activity related to this event, whether of negligence by agents under their employ or otherwise.