The O Scale Resource

NEWS, REVIEWS, INFORMATION TO USE
Volume 5 No. 4
March/April 2018

Partnering
Mentoring
Building

Scratch Building with a Cricut Cutting Machine
The Basic Buildable and Complete Railroad
Build an Early Steam Drop Bottom Gon
Pictorial: The Rockford O Scalers
Building a Dream Workshop
New Tracks Contest
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THE O SCALE RESOURCE
NEWS, REVIEWS, INFORMATION TO USE

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Amy Dawdy

Managing Editor / Advertising Executive
Daniel Dawdy

March/April 2018
Volume 5 No. 4

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

A beautiful shot of the Rockford O Scalers Layout.
Photo by Frank McCabe
Photoshop by Daniel Dawdy

BILL OF LADING

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

This issue is once again all about building and brings you, the reader, some great articles including not only rolling stock, but also loads, a dream workshop and track plans, along with an in-depth pictorial of at the Rockford O Scalers. If you need some scenery inspiration, check out some of the individual scenes on this layout, or better yet, visit their open house during the March Chicago O Scale Meet in Lombard, Illinois March 16-18.

The Model Railroad Resource is once again sponsoring the model contest at the March Meet. So get those entry forms filled out (ahead of time if possible) and bring your models to the show! For more information about the contest and to print forms, go to the model contect tab on the website or download them from the back of this issue. As long as I'm not too tired from my chemotherapy, I will once again be overseeing this table. I'm looking forward to seeing everyone there, not only old friends, but also new.

Dan & I will be there all weekend, so if you miss me on Saturday, stop by our table in the trading hall on Sunday. We'll be bringing some projects from the magazine for you to see including the intermountain boxcar build project from the last issue (January/February 2018) and the Milk Station from this issue. This project was only possible because Dan was good this year and got was he asked Santa (a/k/a Amy) for – a Circuit Explore Air™ 2. For those of you that don't know about this machine, it's long been used in the scrap booking craft. Dan has now used it to cut cardstock, styrene and bass wood to make a milk station for his Richmond, Danville & Southern RR. There's even an accompanying video so you can follow along with the article.

For any of you thinking about building a workshop, be sure to check of Serge Lebel's dream workshop in this issue. He put a lot of thought and research into it, taking some ideas from an article published 40 years ago, and built the workshop before starting construction on his Canadian National Railways Sanmore Subdivision. Serge has and incorporated some neat ideas, including a separate woodworking shop and separate spaces for each area of modeling, along with a research area. I understand that we don't all have the space to do what he has done, but why not incorporated some of his ideas into the space you have?

Don't forget to recruit the help of others if need be. All you have to do is ask – you have nothing to lose. If you don't like the answer you get, ask someone else. Speaking of asking for help, this issue once again also highlights the importance of mentors in our "New Tracks" section. There are some great mentors listed here, along with ideas to find mentors on your own. To encourage the concept of mentoring, "New Tracks" is offering 3 individual modeler contests and one club contest in this issue.

Happy Reading & Happy Modeling,

Amy Dawdy

NEWS YOU CAN USE

Protocraft announces The Greenville Design 70-ton Drop-End Mill 52'-6" Gondola.

Gondolas were the railroad's most versatile freight car with over 300,000 gondolas in service in the mid-1950's - an incredible number, plus 12,000 in Canada. They came in a wide variety of designs and lengths, mostly according to the needs of a particular railroad, and could transport a large diversity of heavy and bulky commodities, steel products, machinery, minerals, lumber and scrap metal.

Built in Korea by Boo-Rim Precision to very exacting standards from original builder drawings, with Ed Hawkins as a consultant for the entire project, these all-brass models are exquisite in accurate detail and dimensions. (for more detailed information regarding the prototype, we urge you to consult Ed Hawin's and Pat Wider's *RP CYC series, Volume 3*, pages 52-67).

Never before offered in O scale brass - and unlikely to be reproduced again. The following cars are offered in this series:

#3601 CB&Q/C&S	#3602 DT&I
#3603 ERIE	#3604 NKP
#3605 NYC	#3606 P&LE and a different version for the NYC
#3607 Patapsco & Back River - and South Buffalo	#3608 PM
#3608a C&O - cars handed down from the PM with minor modifcations	#3609 RI
#3610 SL-SF	#3611 WP

Decals are available for each car plus repaints at Protocraft Decals. See their Website for full details.

Woodland Scenics is proud to present our newest addition to our Just Plug® Lighting System: Just Plug O Scale Vehicles.

Adding a Just Plug Vehicle is a fast and easy way to add light and realism to a back country drive, a busy downtown street, and everything in-between. These vehicles come in twelve different styles, all of which are currently available in N and HO scales. Each one comes with a driver and LED headlights and taillights. The Police Car even has a flashing light on

the roof for an added touch of authenticity. Installation is as easy as drilling a hole and plugging into your Just Plug Light Hub.

For more information about this or other Just Plug products, visit woodlandscenics.com

Monster Modelworks has a new O Scale Brick City Jail. Based on the Paseo Robles City Jail, located in Paseo Robles, CA. This city jail was built around 1889 and used until the 1940's. Jesse James was thought to hide out in the surrounding hills of Paseo Robles.

Includes:
- 3D Laser Engraved Old Brick Walls
- 3D Laser Engraved Brick Corner Pieces
- 3D Laser Engraved Brick Overlays
- Lasercut Peel & Stick Jail Doors and Window Bars
- Rounded Concrete Roof
- Laser Cut City Jail Sign Stencil
- Laser Cut Mail Pouch Tobacco Ad Sign Stencil

Dimensions: 4.76"L x 3.68"W x 4.4"H

See their Website for all the details.

www.RailroadBackdrops.com is introducing their new website rollout beginning March 1, 2018. Already the easiest railroad backdrop website to navigate with it's 1-2-3 step ordering process, we have listened to our customer suggestions and added several new features. We have moved the sizing and pricing selection to step 1 so no more hunting around for pricing. www.RailroadBackdrops.com is the only backdrop maker that allows you to select from a variety of sky and cloud patterns to put behind your scenes so the cloud patterns do not repeat over multiple scenes and we have expanded our selection of these skies.

We are really excited about our newly added and unique "Wishlist" which lets you save, sort and see thumbnail pictures of backdrops you are thinking of ordering so you can compare scenes and select backdrops that will match best for your needs. Of course, our custom blending service is still available so we can blend different scenes seamlessly into each other to create one natural looking scene customized for your layout.

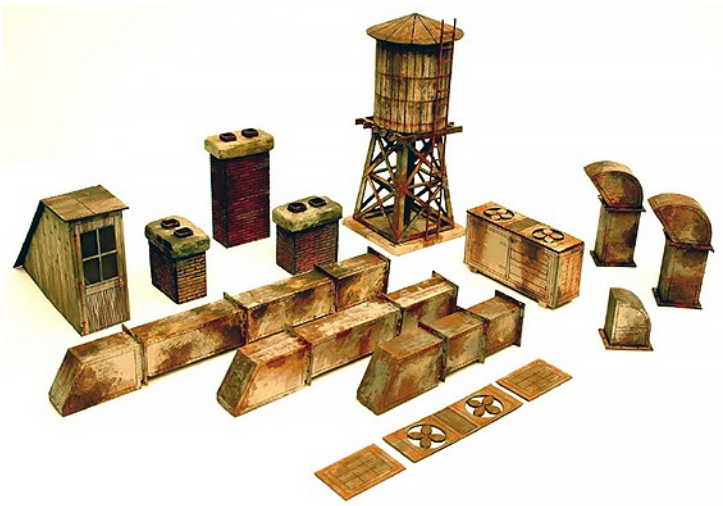
See their Website for more details. The is new product will roll out on March 1st!

Nick Masney from I.T.L.A. Scale Models has some new products in their catalog and on the way.

First is their Roof Top Detail Kits. Add our Roof Top Detail Kit to the O scale building of your choice. Our kit builds into 15 finished components.

This laser etched and cut wood kit easily builds into the parts pictured here. Add to the roof top or walls of any structure. It is easily paintable - we brush painted the parts pictured using simple hand brushing techniques and thinned water based acrylic craft store paints (Americana brand, Craftsmart brand, DecoArt brand).

KIT FEATURES 15 detail parts …
- ► 1 highly detailed Roof Water Tank kit
- ► 1 Roof Top Service Staircase Exit
- ► 1 Roof Top Air Conditioner Unit
- ► 3 separate Exhaust Vent and Fan details
- ► 3 Chimneys in 2 sizes
- ► 3 Roof Exhaust Ducts and bracket details, in 3 lengths
- ► 2 "Snorkel" type Exhaust Ducts
- ► 1 90 degree Exhaust Duct



This detail set is available now on their Website.

Coming soon is their new Olympia Tool & Die kit. The photo is a close up on one wall section detailing some of the laser etching we will be producing. Check back in the next issue of *The O Scale Resource* for more details!

Harry Hieke from harryhieke.com sent us his newest product a Gas Holding Tank.

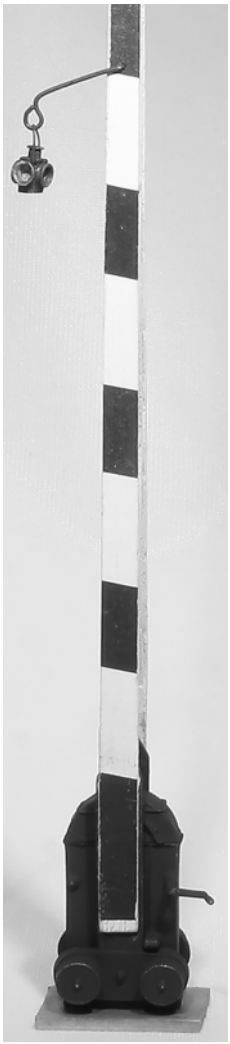
Combination poly-resin injection molded styrene. 12 1/2" diameter 18" tall. First time offered in OGauge. As shown $675.00

See his Website for details.

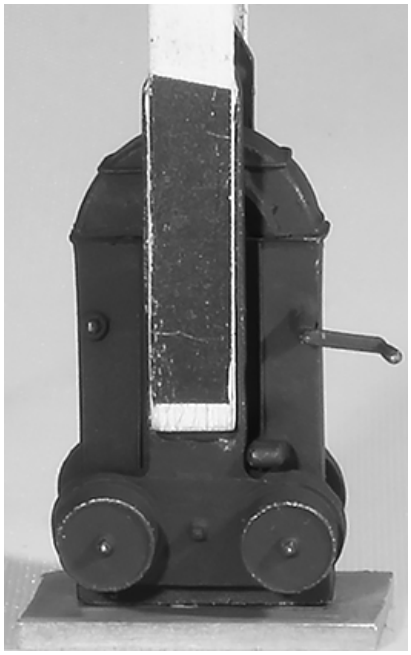
Atlas O has some new paint schemes for their 1937 AAR double door boxcar. CP Rail shown. Just like its single door counterpart, the 40' 1937 AAR Double Door Box Car is well constructed with high quality craftsmanship. Featuring accurate painting and lettering, this 40' 1937 AAR Double Door Box Car captures the history and nostalgia of the real life model with great detail.

Also for the Train Master Line 50’ 6” boxcars. Green Bay & Western shown.

See their Website for all of these.



Richard Rands from Berkshire Valley Models has rereleased some more beautiful items that have not been available for a while. #467 Crossing Gates are laser cut wood & white metal castings. Included is a fixture for easy construction of the crossing arms.



#291 Oxen team with yoke are white metal castings as is #288 Hatted Horse with harness.

See their Website for more great items!

Soundtraxx Announces Youtube Video Series. This series of short videos is intended to supplement information provided in SoundTraxx’ online and print documentation, and focus on features of all SoundTraxx product. Videos will show the feature benefit, how it works and why it is important for prototype operations.Videos will be released weekly and will include product installations, tips and tricks for getting the most out of your SoundTraxx product. Early releases will focus on the features and benefits of the Tsunami2 line of Digital Sound Decoders.

ON BOARD with SOUNDTRAXX

A Pictorial of the ROCKFORD O SCALERS

Photos and captions by
Frank McCabe

Last issue of *The O Scale Resource* had a few pictures from the Rockford O Scalers open house. Amy and I were in Cleveland that weekend so Glenn Guerra took a few shots for us. The club was originally featured in the January/February 2016 issue of *The O Scale Resource*, but it's time we revisit this beautiful layout and working with Frank McCabe, we decided to do a pictorial of this layout.

Look not only at the trains, but the small scenes that are everywhere on the layout. Notice the number of scratchbuilt items… it's time we all tried to start building. There are many pictures that should give you ideas for your own scenes.

OPEN HOUSE! Another Rockford O Scalers Open House will be Sunday March 18, in conjunction with the 2018 O Scale Chicago March Meet. If you possibly can, don't miss this extraordinary layout for yourselves.

Most pictures are numbered and locations shown on layout map at the end of the article.

Fellow O Scalers at the Rockford O Scalers Fall Open House - Map No. 3

Dan Pantera and Eddy Wichman watch the action at the ROS Fall Open House - Map No. 7

Mike Hill looks over Nash Yard at the ROS Fall Open House - Map No. 11

Julie Ackerman and Frank McCabe at the ROS Fall Open House - - Map No. 15

The Rockford O Scalers are (left to right) Greg Anderson, John Handlogten, Frank McCabe - - Map No. 17

Atlas California Zephyr entering a super elevated curve on the DCC section of the layout - Map No. 1

MTH Southern Pacific AC-6 weathered by John Handlogten - - Map No. 2

Rock Island E6 power on the Kansas City Rocket - - Map No. 9

A Rock Island train makes a station stop at Nash Flats with Nash Yard in the foreground - - Map No. 5

Steam power at the Nash Yard round house - - Map No. 10

Chicago Great Western F3 ABBA on a caboose hop - - Map No. 14

An aerial view of the Nash Yard roundhouse and engine servicing area.

Anderson Hardware gets their coal delivered by the hopper car load.

Above: People are lined up to visit the EMD E7 locomotive cab of the "Train of Tomorrow"
Below: Looking down one of the streets in Nash Flats

Looking down the mainline near the Route 41 grade crossing

The grain elevator at Nash Flats

A Hobo walks up from the tracks along a fence line - Map No.12

Highway grade crossing next to "Gottman's Gas Station"

Gassing up a '49 Ford at the Route 41 Road House - Map No. 40

The "Auto Pound" next to the main line

A view of the double track bridge over the river

The beaver dam is being watched over by a pair of bald eagles - Map No. 4

A resident of the beaver dam ventures outside - Map No. 8

Scratch built sand house by John Handlogten - Map No. 18

An unfortunate mishap! - Map No. 28

Nash Flats street repair on the corner - Map No. 28

McCabe Hobbies on Main Street in Nash Flats - Map No. 26

The country road bridge was scratch built by Greg Anderson - Map No. 51

The local Studebaker Dealership is located near the mainline and not far from the Nash Yard Roundhouse - Map No. 29

C&NW 4-6-0, Number 1385, at the Nash Yard Roundhouse - Map No. 6

Above: Anderson Hardware in Nash Flats - Image Map 30
Below: Getting ready to head to the field - Map No. 47

The Lucky Strike shed was scratch built by Bob Zinn from coffee stir stickss many years ago. Bob was one of the original members of the Rockford O Scalers, but now lives in New York. - Map No. 48

The corn field next to the shed was created from "AstroTurf" - Map No. 48

A Greyhound Lines Brill bus waits at the wig-wag railroad crossing signal on Route 41 - Map No. 53

This barn was scratch built by Bob Zinn

A camp site near the tracks" - Map No. 33

A view of a small on-line town

A local artist paints a picture of a steam locomotive along the main line - Map No. 52

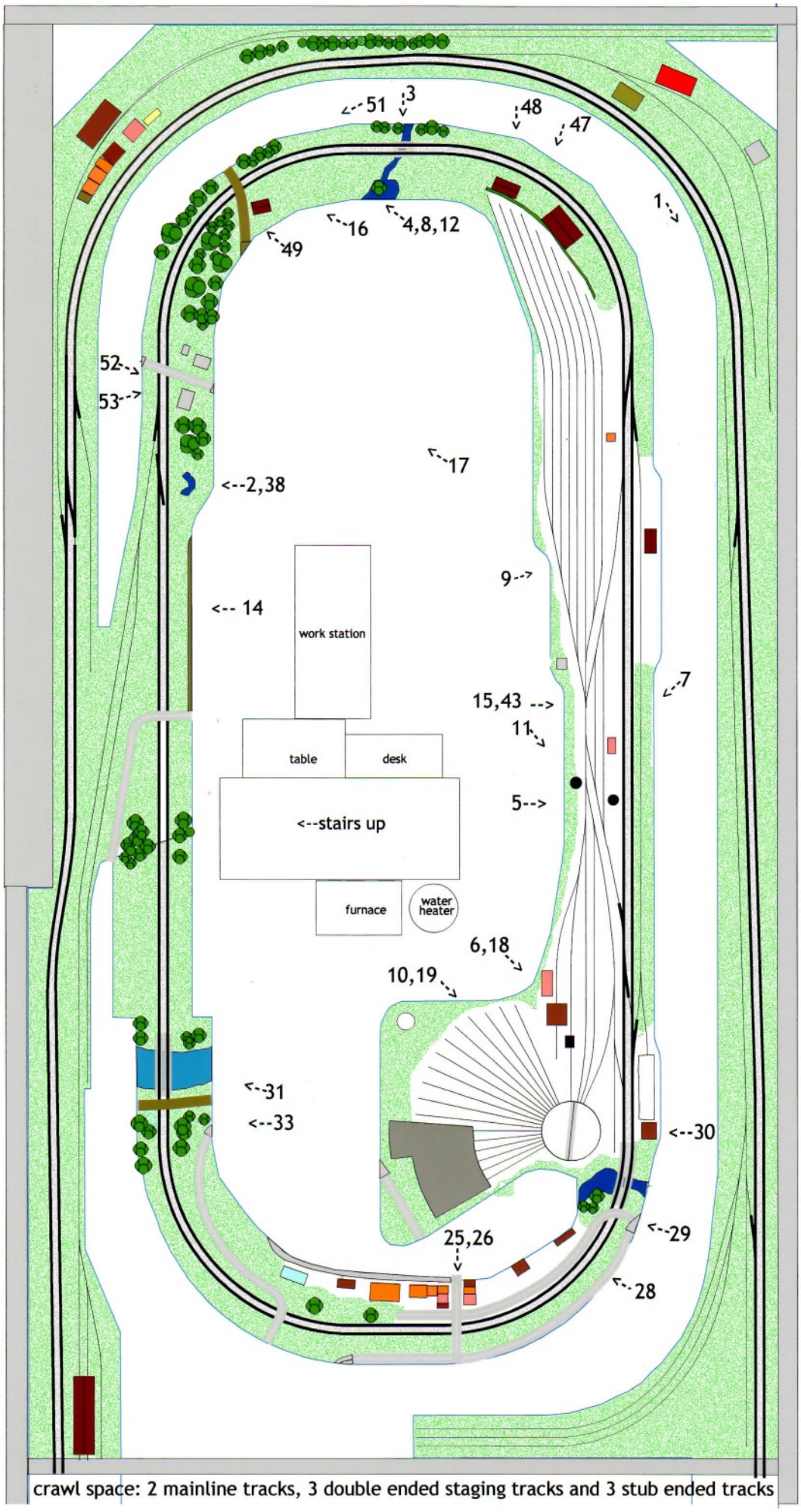
Hobos waiting to jump a Westbound Freight - Map No. 38

Grandma does some wash in back of the farm house - Map No. 49

Looks like a low tire on the Nash! - Map No.43

An impromptu meeting at the Nash Yard Roundhouse Map No.19

A local angler tries his luck - Map No. 31


51
3
48
47
1
16
4,8,12
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53
17
<--2,38
9-->
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work station
15,43 -->
11
7
table
desk
5-->
<--stairs up
furnace
water heater
6,18
10,19
<--31
<--33
<--30
25,26
<--29
28
crawl space: 2 mainline tracks, 3 double ended staging tracks and 3 stub ended tracks

Mentor Definition: A Trusted Counselor or Guide

Manufacturers Mentoring Contests & Your own Individual Mentor

By Jim Kellow MMR

In this article I am going to introduce you to several manufacturers and individuals who will help you improve your building skills and develop your confidence to start and complete modeling projects. I hope you take advantage of these outstanding opportunities.

Manufacturers who want to help you learn to build better models

I told you that manufacturers would be interested in helping modelers increase their skill levels and get building! To prove it, I asked several for their help, and they responded as I knew they would. I owe Korber Models, Right-O'-Way, Carolina Craftsman Kits, and Weisman Model Services my sincere thanks for believing in the need for modeler mentoring, and being willing to be the first of several firms to respond to my request for help with this project. There are more firms who have also responded which I will include in future articles. However, I decided to limit the number of suppliers in this article as we are breaking new ground and I am trying to make the contests I am about to tell you about beneficial to both modelers and the manufacturers involved in this effort. This magazine, the manufacturers I am writing about, and myself are in as much a learning experience in promoting mentorship as a way to increase model building in the hobby, as we are asking you to be by going down "New Tracks" and participating in these contests. Good luck to all. Please show your appreciation and thanks to these manufacturers by entering the contests.

By the way, if you are a manufacturer that I have not already contacted for future articles and want to participate in this project, please contact me, at: jimkellow@oscaleresourcs.com

KORBER MODELS located in Atlanta Indiana is owned by Steve Nelson of Mr Muffin's Trains. Steve was the first manufacturer I contacted, and when he immediately agreed to participate, I knew this effort was going to be successful. Thank you Steve for your help and encouragement.

Korber Models has been a leader in model railroading structures since 1979, making great looking, unique and easy to build models that bring

your railroad to life. Korber Models produces a complete line of structures for HO and O Scale hobbyists featuring unique items such as their popular roundhouse, power plant and grain silos. As model railroaders, the owners and staff understand how getting just the right building or structure can make all the difference in the look a modeler is trying to create, and they are dedicated to help you do that. Korber Models offers a wide range of model railroading structures for sale on their website at korbermodels.com featuring models manufactured in Indiana USA. You can visit them at 165 E Main Street, Atlanta IN 46031 or call at 765.292.2044

Jay Criswell of Right-O'-Way

Some of the beautiful switch castings from Right-O'-Way

Korber Models offers as one of its services the professional building of its kits, lighting of the structure, and weathering of the structure. One of their skilled staff will provide mentoring to the modeler for the construction of their #950 Flag Company kit used in this contest. The method of contact between the Korber mentor and the modeler building their kit will be decided by the modeler and the mentor. The kit and the mentor will be provided by Korber Models. The winner's model and comments about what he learned from the experience will be featured in a future mentoring article in this magazine and posted on the "New Tracks" Facebook page.

RIGHT-O'-WAY's Jay Criswell told me "Our goal, as documented in our History section on our website. Right-O'-Way was started by Gene LaVancil and continued under Lou Cross' leadership. Both men did a tremendous job of promoting their business along with O Scale model railroading, in general. They realized that conducting themselves, and their business, with the highest degree honesty, integrity, and quality was the formula for success.

Because I was lucky enough to have the honor of continuing the Right-O'-Way line, bestowed upon me, I pledge to continue the tradition created and nurtured by Gene and Lou. We will continue the business practices set forth but, I tell people, "We're going to attempt to bring Right-O'-Way into the 20th Century….. we'll deal with the 21st Century later. This will include, but is not limited to, an internet presence, adding products, and improving some of the existing line.

All of this will take time and capitol but we have a plan and it's more important to take our time and get it right. If anyone ever has an issue with Right-O'-Way I ask that you please give me the opportunity to make things right." Thank you, Jay Criswell.

The brief communications I have had with Jay make me truly believe he will be successful in developing the company. For example, he told me that "over the past year he picked up the track part from Protocraft and bought, in it's entirety, Red Cliffs Miniatures and American Switch & Signal." He said that "all of this was done so he could expand the line to include P48 and On3/30. I believe you will see great things from Jay in the future.

Right-O'-Way's catalog is available on their web site. They essentially have all the parts and rail, in both O Scale and P48, needed for modelers to use to build the most important part of their railroad – the track your model railroad runs on.

For this contest, Right-O'-Way will provide all the rail and parts needed to build a turnout of the modeler's choice between a #5 to a #10 right or left hand turnout in O Scale or P48. In addition, Right-Way will provide the mentoring help of Pete Mottershead who owns Speciality Track Services and only uses Right-O'-Way products in building his track work.

Go to his website and you will see Pete's skill in building turnouts and be able to read one of, if not the best explanations I have ever seen, on how to scratch build turnouts using Right-O'-Way parts.

I guarantee you cannot talk to Pete very long before you learn of his love for the hobby and his dedication to building the best track work possible. Without a doubt, with Pete and Right-O'-Way, you will be getting the true experts in building O Scale or P48 track work to help you improve your track building skills, and have you travel down beautiful and truly functional "New Tracks". What a deal. The completed switch and the modelers comments about what he/she learned will be included in a future mentoring article in this magazine, as well as on the "New Tracks" Facebook page. Thanks Jay and Pete for your help.

Jeff Grove from Carolina Craftsman Kits.

By the way Pete's company, Specialty Track Services, also designs track plans for customers. One of his plans is presented in this issue.

Other track plans designed by Pete can be found in the following issues of The O Scale Resource.

- **Out and Back with Two Yards - July/August 2017**
- **The Two Rail Runner with Options O Scale Plan - September/October 2017**
- **Indurtral RR A Place to Start - November/December 2017**
- **A Country Crossing - January/February 2018**

H.J. Mull Store, based on an actual building in rural NC. Prize from Carolina Craftsman Kits.

Carolina Craftsman Kits is owned by Jeff Grove. I was really pleased to have Jeff participate in this program. Talking with him, I immediately heard his love for model railroading and his desire to have his kits provide a great building opportunity for modelers.

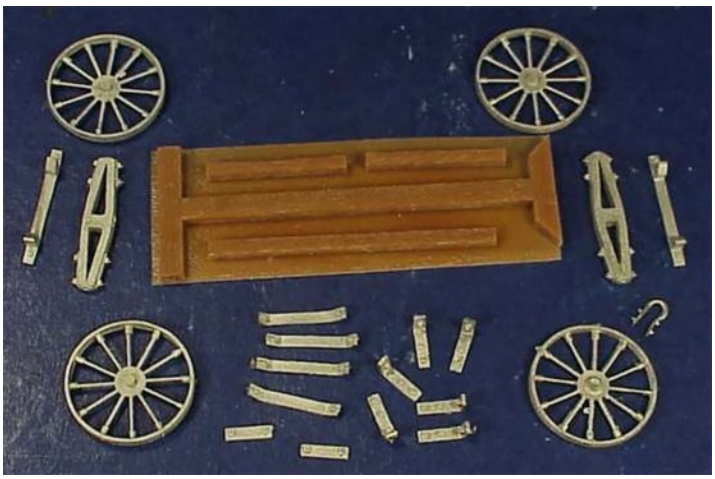
Jeff told me."We began manufacturing HO and O scale craftsman kits in 2010, starting with a few small structures based on actual lock houses along the C&O canal in Williamsport Md. Being pleased with the response, we began adding larger structure kits while still using prototype structures for the inspiration of our kits. We now have over 140 designs for craftsman kits, and do custom design and cutting for numerous others. Some of our most popular kits are our recreations of historical buildings in Newport RI

Other offerings from Carolina Craftsman Kits
A scene from our popular O scale Water Street Docks. These kits are now available individually. Faircloth's Oyster Processing is a vintage NC fish processing facility.

and Wilmington NC. We're a small family operation and try to maintain a workable level of inventory, both for our own sanity, and the needs of modelers. Initially we only manufactured HO scale craftsman kits, but now have numerous O scale kits in our offering". For this contest Jeff suggested his "H J Mull" kit. He believes this will provide the modeler a great building and learning experience.

Jeff will provide to the winner one of his "H J Mull" kits and a skilled mentor to work with the modeler to successfully build the kit. You can find information about the kit at his website The modeler, in addition to getting a great "one on one" education by a highly experienced mentor will gain the confidence to build other projects he/she might not even think about building today. The completed model and comments about what the modeler has learned from this experience will be published in a future mentoring article as well as on our "New Tracks" Facebook page. Thanks Jeff for your help.

Wiseman Model Services Talking to Keith Wiseman, I immediately knew I was not just talking to the owner of a major supplier to the model railroad community, but also a model builder and craftsman. Yes, a model builder can recognize another builder in a few minutes of conversation. While Keith admits he does not have the time for model building he once had, it was evident to me he wished he did. I truly believe, as I explained my "New Tracks" mentoring series to Keith, he not only immediately understood the need, he was instantly interested in becoming a part of the mentoring program. It was a way for him to get back into the building of models, if only for a little while, and help another modeler learn building skills at the same time.



Logging wagon kit. Prize from Wiseman Model Services

He told me he could remember building his first Grandt Line Kits. He credits these kits with teaching him the basics of model railroad car construction and nomenclature that enabled him to move up to more advanced kits. He laughed when he recalled the instructions for those kits were so well done and easy to understand that anyone could have built a successful model by just reading them.

For this contest he suggested his O scale logging wagon kit. You can find a photo and information about the kit at the Wiseman Model Services website. He believes this kit will enable the winning modeler a great building experience and gain the confidence to build more advanced kits in the future. Keith will also be the mentor to the modeler to build the kit. It doesn't get any better than that.

Thanks Keith for your support. To get information on Wiseman Model Services and the many products they manufacture, please go to http://www.locopainter.com/

How to enter each contest

The purpose of these contests is to provide skilled professional mentoring to a modeler who is interested in learning the skills and methods needed to build model railroad kits. No one can better do that than the manufacturer who made the kit. These contest will be a great opportunity for a modeler to work directly with a highly skilled kit builder and learn his skills and techniques, as well as develop the confidence to build outstanding models for their railroad. I wish all of you much success, fun, and great modeling.

To enter go here and fill out our form.

A modeler can enter as many contests as they want, but a modeler can only win one contest shown in this article. If by chance a modeler is randomly drawn as the winner for more than one contest, the modeler will be given his/her choice as to which contest they want to accept and another person will be drawn to win the other contest. The order of the drawings will be the same as the contests shown above. All emails must be received by March 19, 2018. This winners will be named in the next article in this series as well, as on our New Tracks Facebook page here.

I have personally entered many contest and some I felt were judged fairly and some not so much. I did not want anyone to feel they did not have an equal chance to win or that they were not properly included in the contest. The random drawing, by the independent Overseer for each company's contest, from the people who send in an email to enter the contest, is hopefully going to make everyone feel they have an equal chance to win. Each company will contact their winner directly to arrange for mentoring and delivery of material involved. Good luck to all of you. Have fun going down these "New Tracks". And thanks again to these companies for their help in this mentoring project

Individual Modelers who could be your Mentor

Another way to find your mentor is to ask a skilled modeler for help. The purpose of this section is to spotlight skilled modelers who have successfully built outstanding models and have agreed to mentor other modelers who ask for their help. I will introduce you to additional skilled modelers in future articles.

Each of these skilled modelers has had the benefit of learning their skills and abilities from other mentors and/or a lot of personal trial and error in model building. They now feel it is their turn to pass their knowledge along to others who want to learn. Direct email contact is provided for each of these individuals. I hope you take advantage of learning their skills and knowledge. I know you will learn a lot, gain confidence in your building capabilities, and build better models. Good luck going down these "New Tracks".

Larry Burk:. I have been a model railroader for about 60 years. Actually, I've been exposed to model railroading since birth – my father had a large S scale American Flyer layout in our basement and some of my

Larry Burk

earliest memories are of playing with those trains.

I've modeled in N scale, HO scale and am currently in On30 scale. I've had micro small layouts and huge club sized basement empires. My current layout is fairly large and I am really enjoying working in the larger scale.

I've never done prototype modeling, have always enjoyed doing my own thing with Proto-Freelance type of layouts. That gives me the ability to have any equipment I like but keeps the prototype fidelity. I have long been a fan of Allen McClelland, and subscribe to a lot of his beliefs in keeping the layout prototype looking.

Over the years I've always seemed to use the "trial and error" method of modeling. It is time consuming and, at times, can be really frustrating. I do know I am still learning. It would have helped my modeling skills grow at a faster (and less frustrating) rate if I would have had a mentor. Although I do not

Northbound passenger crossing the Gratiot River trestle on Larry Burk's On3 layout. Photo by Larry Burk

consider myself an "expert", I do have a lot of experience and love helping others in the hobby. I enjoy mentoring in areas I feel competent, like benchwork, wiring, scenery, hand laying track and operations.

Switching Quintus Lumber at Laurium on Larry Burk's On3 Layout. Photo by Larry Burk

I am retired and live in SE Michigan, but with the Internet, am able to communicate with individuals worldwide. I look forward to helping and sharing any knowledge I have. It is a wonderful hobby filled with many, many friendly people and hope to see it grow well beyond my time. larryb48442@yahoo.com

Allen Littlefield wrote: "When Jim Kellow contacted me about the subject of mentoring and its effects on the hobby, I spent some time reflecting on my own modeling career and what the influences were. I suppose my father was my best mentor as he shared his love with trains with me and showed me what could be accomplished with a good imagination and the willingness to give a project a try or 'go' as our Brit friends would say. I have not had a one-on-one mentor per se. I have a lot of inspiration from looking at the work of others and reading "how to" articles in the model magazines. For some reason, I always knew I could do something, but needed to hone skills and acquire the right tools to get a job done even as far back as 12 years of age. Over the years I have looked at, read about and admired the work of others that proved that something could be done to higher standards if one was inspired and had the drive and patience to try. In my short career as an art teacher, I always told my students "you can't make anything if you can't make a mistake". One must shuck off the fear of not getting it right the first time and being 'ashamed' of their efforts.

I suppose that many things contribute to a successful modeling career or effort. 1. The willingness and desire to try and keep on trying to improve. 2. A Mentor, one-on-one, if possible, especially for mechanical skills. 3. A desire to build on the inspiration from the work of others and to always honor those modelers that have shown you the way. John Allen immediately pops to mind. 4. To always be aware that you have more to learn and can always improve.

After attending the NG meet at Kimberton, PA and attending lots of train shows, I realized that there was a missing element in these venues, the one-on-one contact with other individuals that share your interests. You might see someone in passing that you might like to sit down with and discuss modeling skills over a beer or a coffee but only share a few words in passing as the crowd moves on. I started the Mid Hudson On30 Meet in order to have a gathering of like-minded modelers that could sit down together for a day and a half and converse, share and exchange ideas. Vendors were welcome but not the emphasis. The meet has been going on for at least 15 years now and many wouldn't miss it if possible. Here is a form of mentoring, not the personal relationship that some people have experienced, but a lot of help and ideas are exchanged and all leave the better for it. Most modelers that I have met over those years are more than willing to share "secrets" and techniques for what they have done and are will lend a hand, physically if necessary, to help someone with a project. Also, a lot of friendships have been made that are some of the most enduring and genuine that I have ever experienced.

I hope this brief essay has contributed in some way to the subject of mentoring and how to keep the hobby alive, and I wish to thank Jim for inviting me to put in my two cents on the subject. If you feel I can be helpful in your model building, please email at Allen.Littlefield@oscaleresource.com so we can arrange how to proceed."

Kevin Spady is very well known and respected for his modeling abilities particularly in California model railroad circles. Here is a little information about him in his own words.

"I have been a modeler all my life. As a youngster, I modeled plastic cars and military (even back then I kit bashed things) and gradually became interested in model aviation and radio control. I spent much of my midlife building and flying model airplanes, but I always had a deep interest in model trains. I collected brass HOn3 for several years, but sold my collection and started doing model railroading in earnest about 10 years ago when I was exposed to modular railroads. I have never had space for a full fledged layout and modular railroading seemed like a prime opportunity to engage the hobby in a very detailed manner. I choose On30 gauge/scale because my eyes are not what they used to be and the scale has a broad range of kits and RTR waiting to be modified and weathered. I get the most joy out of creating as realistic environments as possible and, as a photographer and architect, I love visualizing realistic scenes within my modules.

I most enjoy aspects of model building that create a sense of realism. Detail, weathering, creating scenic environments, customizing models to create "one of a kind" locomotives or rolling stock are all things that I enjoy and would be happy to mentor people on. I am not as strong in electronics, operations, or "rivet counting", although I do enjoy those aspects of the hobby as well. My interest is in creating inventive scenes that look realistic, not in reproducing something exactly in the real world.

I would be happy to mentor by phone or internet primarily. Since I don't have a home layout and most of my modules are stored in a trailer, only to be displayed periodically at shows, it is hard to have someone visit to see what I do. Having said that, I would be happy to have visitors in the area who might want to learn specific techniques or applications, as long as they don't have expectations of seeing a layout. I regularly mentor members of my On30 group, the California South Coast On30 Modular Group in weathering, painting, and building techniques and have presented at the NNGC convention and our local NMRA chapter. Our layout can be seen at most train shows and a few special shows throughout the year around Southern California.

2-6-0 Mogul highly modified with dead rail install, plow and various details. Photo by Kevin Spady

Pudding River Lumber Company Shay No. 3 crossing the Pudding Rive Slough. Modified Bachmann Shay Photo by Kevin Spady

I can be reached at kstady@oscaleresource.com. Once we touch base, we can make arrangements for future mentoring sessions. I look forward to hearing from those of you who feel I can help you improve your modeling efforts."

Pudding River Lumber Company Articulated No. 9 pulling a log train near the PRLCo. Engine House. Built from a Bachmann 2-6-6-2 with Backwoods Miniatures Saddle tanks and other detail modifications.
Photo by Kevin Spady

Providing Local Personal One On One Mentoring

Providing local personal One On One Mentoring, I recently saw a post on a Facebook S scale Railroading Facebook group from Rhett Graves saying that he and some of his local friends would love to have a mentor, but he needed to have one provided locally.

Here is what Rhett said: *"On mentorship, you've definitely got the right idea. The challenge is mentoring is an organic thing that involves friendship, respect, patience, and mutual time to build. Those things are more easily accessible when two people can meet face-to-face. You've at least planted the seed, fertilized AND watered by providing available mentors. Hopefully we'll get plants and not weeds!*

I'd love to avail myself of this opportunity, but I have a wife, 4 kids under 8, a job with travel involved, etc. I'm not in a position to make a commitment to a mentor, especially one that doesn't live near me. What would help me the most is to have a series of weekend workshops with a group of modelers. The workshop might start out on a targeted skill (working with brass, working with styrene), but could blossom from there. I feel selfish suggesting this, but I know two other would-be modelers in my area with the same challenges."

I replied to Rhett *"I love your idea. If you and your friends want to help fill in the blanks for this kind of mentoring program I will devote an article to help get the program started in your local area and if other areas want to do it that would be great. I will do whatever I can to help you get this idea going. If you want to continue this discussion please go to my Facebook page and send me a message."*

Since he and his friends are exactly the modelers or potential modelers I hope will benefit from my mentoring series, I was very pleased when he contacted me and we talked by phone. After several conversations, these are some ideas we feel may work at the local level to provide mentors for modelers regardless of the scale they model.

One is to contact a local model railroad club. Whatever the club's layout scale, it still can be a place to investigate whether there are club members who can be your mentor or if the club has its own mentoring program for its members that will suit your needs. Even if you decide the local club is not for you, there may be a local club member you meet who can be your mentor, either individually or in a group. Your home, if possible, can provide the meeting place, or if not available, a local church or library may be a source you could ask for meeting space for your local group. If there is no local club, then see if a local hobby shop can help find a mentor for you and your friends to work with. If no club or hobby shop, then contact a manufacturer or supplier of parts you or your friends buy from and ask for help in finding a local possible mentor.

My personal option is to contact the local NMRA Division Superintendent and discuss your mentoring needs with him. (National Model Railroad Association https://www.nmra.org) Get his ideas of how his Division can fulfill your needs. If the NMRA Division can not meet your needs, maybe one or more of the Division members would be interested in being your mentor. If you are not sure about paying a full membership fee to join the NMRA, consider joining the NMRA for a trial 6 month membership if the Division can provide you mentoring on a monthly basis for 6 months. If it goes well, join the NMRA full membership program and continue the mentorship program at the Division. Keep in mind the NMRA has an Achievement Program that I believe is fantastic, and I guarantee if you participate in it, you will learn a great deal over and above what you may want a mentor to help you learn. Believe me when I tell you that a great confidence builder is being awarded a NMRA merit award for a model you built.

Our next suggestion is just an idea that needs work to figure out the details, but I believe it has true potential for helping modelers find a local mentor that can fit into their busy existing life style. Rhett mentioned using Facebook Live for mentoring. As I understand Facebook Live, we could arrange all friends of the "New Tracks" Facebook page to be able to use that site for their Facebook Live posts.

One of the biggest advantages of Facebook Live is the use of an existing platform (Facebook) to allow viewers to interact with the presenter in real time. Viewers provide comments just as they would on Facebook and the presenter can actively respond to show something that his viewers want to see. No more "Man, I wish he'd shown me how to..." or "I wish she'd have rotated that just a bit more so I could see how..." Facebook Live records the comments along with the video. Upon playback, the comments appear at the time they were made, which helps provide context for the comment. In other words, the experience is far more interactive than a traditional video, much like an in-person mentoring session would be.

All of the friends of the site can either view the program live and ask questions to the presenter, or can view it later without the interactive feature. Please let me have your feedback on the use of Facebook Live for mentoring purposes by email to me at jimkellow@oscaleresource.com.

A modeler in San Francisco commented that he believes instead of Facebook Live using you tube videos for mentoring may be the an easier method to use, at least for some mentors, because the video can be edited before it is posted rather than being live with all the errors shown. The videos can be posted on the "New Tracks" Facebook page for any modeler to see anytime. Again, I would appreciate comments and suggestions on this proposed method for mentioning.

Maybe some combination of both Facebook Live and regular videos could be a great way for mentors to share their expertise and skills and for other modelers to learn from them. I look forward to your comments. Again my email is jimkellow@oscaleresource.com. In talking wit Rhett he mentioned some additional ideas that could work to help modelers find a mentor to work with.

*"**Monthly Workshops** - Have a regularly scheduled monthly meeting where a particular skill is promoted. This idea came from my friend Daryl Conner at Rail & Sprue Hobbies in Jacksonville, AR. Daryl would open the hobby shop an hour early to folks who wanted to learn. They built a "store layout" called the Tuscarora Lumber Company. The key was that this wasn't a "club layout". It was a directed effort by a layout owner who*

wanted to teach and transfer skills while building a layout. Several father/son teams participated, likely creating some life-long modelers with skills!"

*"**Article Interactive** - This is somewhat of a throwback idea, but could get traction. Since S Scale Resource and O Scale Resource online magazines are not constrained by page count, a series of articles could be written. The mentor would write the first, perhaps dealing with a series of skills for working with styrene. The second article would come from those who are employing those skills, documenting their efforts, trouble spots and questions. Think of it as a protracted exchange, but documented in the magazine."*

This is an idea that I can immediately get started in my articles. A combination of these articles with Facebook Live and/or regular videos on the "New Tracks" Facebook page may really help modelers and I believe worth doing."

*"**Lunch/Breakfast group** - When I lived in Dallas, the model railroad crew would meet for lunch on Thursdays at a given restaurant. I was only able to attend twice, but what I saw were many experienced modelers sharing techniques with less-experienced (not necessarily younger) ones. Folks were encouraged to bring the things they'd been working on for discussion/help. When I lived in Little Rock, Paul Moon (a MMR, I believe) had a breakfast group that met at 6AM on Saturday mornings at the Starlite Diner. Daryl Conner carried on that tradition. Topics there were much the same."*

I hope these suggestions help you find a local mentor and most importantly to me go down some "New Tracks". If anyone who reads this has other ideas on finding a local mentor please let me know at jimkellow@oscaleresource.com. Well that is it for this "New Tracks" article. I hope I have at least got you thinking about model building, getting a mentor, and increasing your modeling skills and gaining new confidence in your building abilities. If so then you are ready to go down some "New Tracks". Best of luck.

I recently talked to several modelers who have some model building experience, but all felt they needed an experienced skilled mentor to help them improve their building capabilities and gain the confidence to start or complete a building project. In talking to them I completely understood what they were saying. After all, I have had those same kind of feelings in the past. In fact, these feeling led me to find my mentor many years ago. I asked them to tell us their modeling history and what they needed and hoped to get from a mentor. Please give some thought about helping these modelers if you feel you have the skills to do so.

Need a Mentor in Milwaukee Wisconsin Area

A few days ago I got the following email from Jim Schneider, a modeler who wants to take his skills to a higher level in O scale. He lives in the Milwaukee, Wisconsin area. I completely understand his problem because not too long ago I was in his same kind of situation. That situation was I wanted to build models and knew I needed someone who knew how to build models to help me. I needed a mentor. I truly hope that someone in the Milwaukee area who reads his email will contact him at the email shown below. He needs help going down "New Tracks".
Jim Kellow MMR

"Jim can't thank you enough for starting this column. My name is Jim Schneider from Milwaukee, WI. Been modeling for at least 20 years in 3 rail. Happened across a Lobaugh Berk a few years ago and off to the races was my fascination to go into 2 rail O scale. I've asked many times at local hobby shops for any old timers out there to help me find an " old timer" who wouldn't mind showing me the ropes. There's a great old layout here in Milwaukee and showed up with my Berk to show I was serious about learning this scale but was received like I was trying to intrude on a secret society. Lol.

But haven't let that detour me. Started building a lot of old Walthers kits etc. Super cool since they all came from my home town. Sold all my 3 rail track and locomotives last week. So now I got a little for my next set up. Actually just bought my first brass Locomotive a Overland heavy Mike. Damn what a engine. That will probably go to Jeff Lemke for a paint and DCC job.

Of course in Milwaukee Road livery. The best thing up to date has been finding *The O Scale Resource* here on Facebook. Dan has been so gracious on answering questions and a lot of other gentleman on the sites such as 2 rail proto 48 railroad Facebook page. So I'm here to stay looking forward to finding a mentor and improving my skills. Maybe redoing my Hines 0-8-0 that I have as a starter brass build I acquired on eBay as a basket case. So many questions about learning the art of soldering.

The P B L video is great, but it's nothing like a one on one with someone. Also have a Mullet river model works C&NW craftsman kit caboose that seems a little daunting to start. So hopefully this column will help me find someone in my area. Would really like to build these to a contest quality piece. Progress not perfection, right. Looking forward to your Facebook page and what I can learn from the guys out there willing to pass on their knowledge. Got to say at O scale in Chicago lot of great guys there sharing their number telling me to call on questions even though they mostly live far from me. I know that there around hopefully this is the beginning of a great journey into scale modeling."

Contact Jim at jimschneider@oscaleresource.com Good luck Jim and let us know what happens in your future modeling.

Need a Mentor in Portland Oregon

A few days ago a modeler contacted me and asked for help in finding a mentor to help he and his son build their model railroad. Since this is the kind of request I had hoped my mentoring articles would generate, I want to post it here and suggest that any modelers who reads this and feels they can help this modeler and his son, contact him directly. I hope this request for help is answered, and I look forward to hearing the results from both the mentor who helps, and the modeler who requested the help, so I can share the results in a future article. I feel both the mentor and modeler will be going down "New Tracks" together. I wish them both much success.
Jim Kellow MMR

Jim:

Thanks for taking the interest to help others of us have mentorship experiences like yours. My O scale Chicago & North Western includes a roughly 50% selectively compressed 8-track representation of the railroad's 16-track Chicago Passenger Terminal (AKA North Western Station). The challenge of representing the architectural features on a grand scale, about 2-1/2 ft wide by more than 20 feet long from Madison to Lake Street, to enough detail and quality but "good enough", so we can finish it someday, is what my son and I are working on. An operating railroad is the highest priority, but this passenger station is a crucial part of the dream since it's the UP "Streamliners" and C&NW "400's", and the commuter service, from the 1950s that I most want to represent.

Someone who might coach us from experience, taking just enough interest in our challenge, would be a joyous help! A friend who couldn't take that on, but had been a professional model builder in Los Angeles for movies I think, told me if I ever finished this structure I would never want to build another model again in my life. I hope not to have it end that way!

I live in the Portland, Oregon area. Since my "scale" is O gauge 3 rail "high rail," most of my train friends are members of TCA or the Toy Train Operating Society. A minority even have a layout, and no one has quite the same desire for a proto-freelanced semi-scale railroad as I do.

Ideas or leads for finding that mentor would be most helpful.

Thanks, Don Thieman Email is don.thieman@gmail.com

I know this is a Scale magazine but I feel that any modeler who wants to learn to build a model or a complete model railroad and needs a mentor to help them complete their project deserves our help. I truly believe the builders who can provide mentoring in our hobby are Scale model builders. Therefore, I believe this is the place for any modeler, Scale or 3 rail, to come and get help. As I stated in my first mentoring article I went from 3 rail Lionel to scale traction because of my mentor. I ask you to help Don.

Resistance Soldering Mentoring

Mentor: Trusted Counselor or Guide

"Club Contest"

One O Scale or S Scale Club will win this contest. The winning club will be able to purchase an American Beauty Resistance Soldering Unit at a 50% discount and use the unit to mentor members in its use.

I believe it is important for a modeler to have a mentor. I am doing everything I can to provide the opportunity to find a mentor to readers of *The S Scale Resource* and *The O Scale Resource* online magazines. This contest is only open to clubs in the US, that have an O or S Scale permanent or modular layout, have an active website about the club, and is open to accepting new members. I am asking that the club also agrees to write an article for the "New Tracks" series telling about the club's experience with the American Beauty Soldering equipment, and how it aided in mentoring the members of the club.

Ultra-Light Capacity Probe-Style Resistance Soldering System. Just one of the many products you can select.

Local clubs can be an excellent way for a modeler to find a mentor. For one, they are local so personal contact is easy. Two, they have skilled builders in their membership. Third, they need to have new members who want to learn about building a model railroad. Fourth, the club offers an existing model railroad layout for the benefit of its members. Therefore, it is only natural in my opinion for a club to have an active mentoring program and use it to attract new members. I believe having an American Beauty Resistance Soldering unit will enhance their mentoring program. Make sure your club enters this contest.

The winning club gets a one time offer from American Beauty **of 50% off of the retail price of one of their Resistance Soldering units.** That's right ½ off of the new unit price. The club can select any of the Resistance Soldering units offered by American Beauty. This is a very significant discount, and I can't thank American Beauty enough for providing this opportunity. American Beauty's Resistance Soldering equipment is a product I have had the privilege to use since the mid 1990s, and know the winning club and its members will benefit from their product.

How Does A Club Enter to Win **(Dan the contest form needs work)**

The club needs to fill out our form here. The independent Overseer will randomly draw the winner on or about May 19th, 2018 I will notify the winner, and the winner will be posted in a future "New Tracks" article in this magazine and on the "New Tracks" Facebook page. The club's article about its experiences using the soldering equipment will also be posted here. Good luck to all!

Why is this contest For clubs and not individuals?

Limiting this offer to clubs fits in with the educational goals of America Beauty. It also allows the use of the soldering equipment to the greatest number of modelers. One of my goals in doing these articles is to reach as many modelers as possible so limiting entries to clubs was a easy decision. I hope everyone understands.

I also believe clubs can be an excellent place to find a mentor; and for many of us, the best way for us to build and operate a model railroad. I only have joined one club and that was due to my mentor pushing me to do it. He only pushed because to join required me to build a traction layout. I joined the Detroit United Railway (DUR) club and met a lot of very talented modelers.

What I found in the DUR club was a group of modelers who could, and would, answer my questions and even come over to my house and help me build my first traction layout. I truly have my mentor to thank for my first traction layout and introducing me to a great bunch of model builders. As I said, you had to have a traction layout to join, so everyone in the club had already proven that they were talented model builders.

I am by nature not a joiner and I have met many model railroaders who have never considered joining anything. However, the current economic climate we live in may make clubs much more attractive for model railroaders to join instead of building their own private home layout. Many of us have limited space and/or finances to build a model railroad in our home. Therefore, the club offers modelers the option of building only what they want to for the club layout and enjoy the significant operational possibilities of the club's layout.

But the real benefit could be to find a mentor who you can work with. Some clubs offer clinics for their members, and the person giving the clinic could become your mentor. I know clubs have building and maintenance meetings. These can provide a member the ability to work on the layout with a highly skilled modeler who could become his mentor.

I started with my mentor because I wanted to learn to build models in brass, and soldering was one of the skills I had to learn. This very generous offer from American Beauty enables a club to own its own soldering outfit and will help pass along the skills and techniques of soldering and encourage model building for all its members. Good luck to everyone going down these "New Tracks".

I just off the phone with American Beauty and discussed with them if there would be opportunities for modelers who use their equipment in building models of their railroad to make a video, and have American Beauty then post the video on their website for other modelers to view and learn how to use a Resistance soldering unit. Their reply was that they would very much like to have such videos to publish on their website. Naturally, I would love to see such videos available to modelers as this is just another way for mentoring to take place. More on this later. Let me know if you are interested, and I will put you in touch with the person at American Beauty you need to talk to about this video project.

Scratch Building with a Cricut Cutting Machine

By Daniel Dawdy

I saw a video on using a Cricut Explore to cut wood and styrene for scratch building. It showed what could be done but not how to do it. Intrigued, I asked for a new Circuit Explore Air™ 2 from Santa and, apparently, I was a good boy!

The Cricut Explore is an electronic cutting machine for DIY projects and crafts used mainly by scrap bookers. The newer Circuit Explore Air™ 2 is the one I now have. The Cricut Explore Air™ is the next step down and a little slower. Still, it will work just fine. Santa bought mine in the black version.

Now let's set a few things straight here. The Circuit Explore is NOT a laser cutter. It will not cut anything that thick. I used it with .30 styrene and 1/16" regular and scribed basswood, as well as, .50 mounting board. We'll get into that later in this article along with the accompanying video.

The video is a must to following along. I suggest watching it once all the way through. I have linked to the specific parts of the video allowing you to go right to the part you want to see again. Please remember, the this article ***really needs the video and the video really needs this article***.

The building that we will be making could probably be done faster the old fashioned way, but that's not the point. I want to show you how to use the Circuit Explore in modeling, how to work with the settings and use the on-line software. It's meant to show the possibilities.

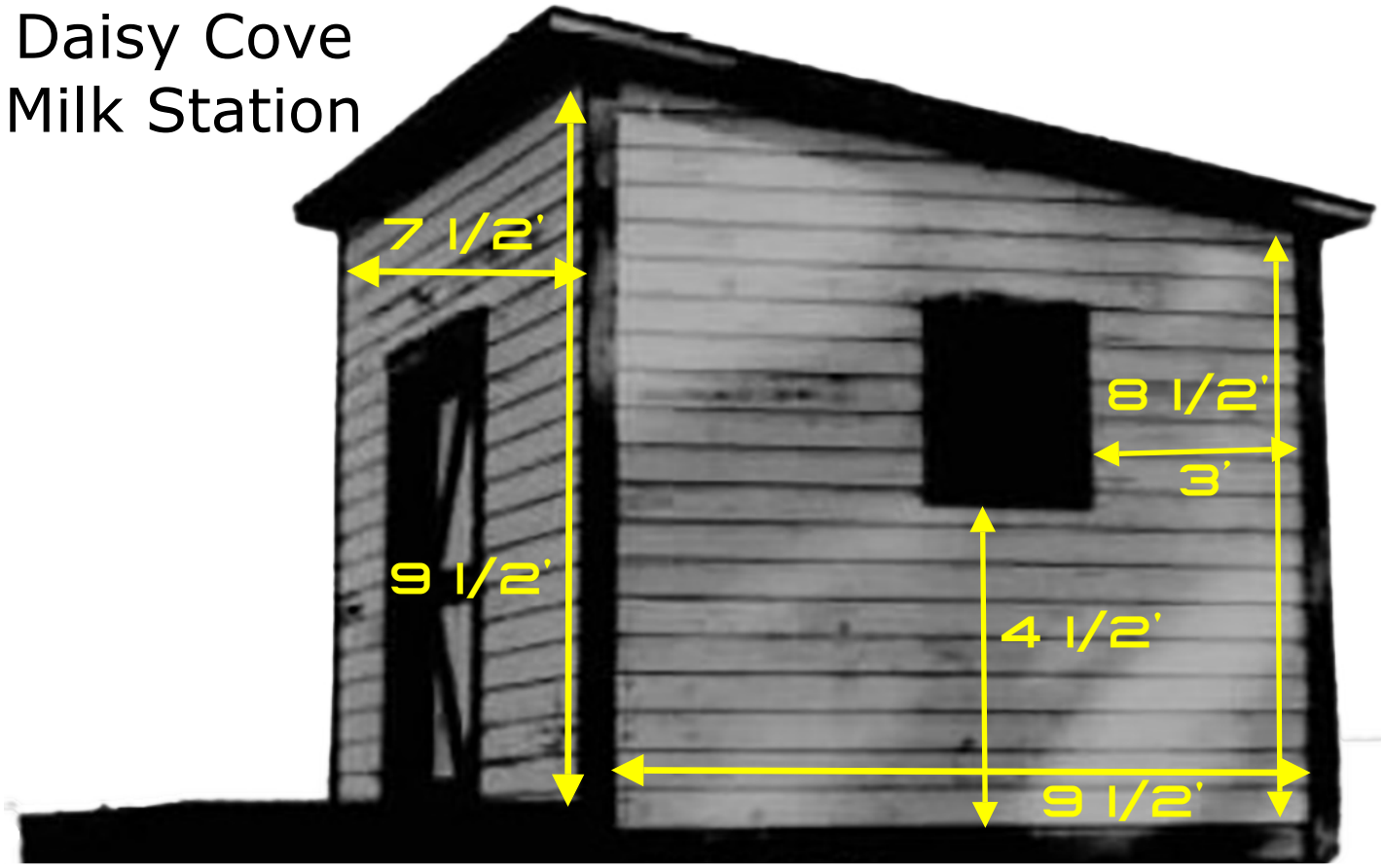
The on-line software from Cricut will import jpg, gif, png, svg and dxf files. So if you are proficient with CAD or other such programs you can send those drawings directly to the Cricut via their software. Now, I wanted this article to get you going right away. If there is a Cricut hiding in your house, I want to show you how to make a small building without any learning any other software. Let me say this another way. There are many good free drawing programs out there. SketchUp and Inkscape are great ones for this, but there is a learing curve. Cadrail will work as well as others. Photoshop and Corel Draw will work. But again, I want to

show the beginner that they can make something with what they have and ***NO*** learning curve. If you have other software and know how to use it, fine, but many do not and I want everyone to be able to do this today.

Also when it come to converting measurements, I want to show on-line calculators for the mathematically challenged among us. The whole aim of this article is to keep things simple using what you have and not run out and spend more money.

We will be making a small milk station where farmers would have brought their milk cans to be picked up by a local firm and taken to a processing plant. I found an old picture on the Internet and thought it would make a great little project.

Once we cut out building, we'll finish the build and scratch build a deck for it.



Assuming a seven (7) foot door the clapboard is 6'

Real Dimensions	Real Inches	1/48 Cut Size
Front wall: 9 ½h x 7 ½w	**114" x 90"**	**Cut Size: 1.88" w x 2.38" h**
Rear wall: 8 ½h x 7 ½w	**102" x 90"**	**Cut Size: 1.88" w x 2.13" h**
Sidewalls: 9 ½h front to 8 ½ rear h x 9 ½ w	**114" / 102" x 114"**	**Cut Size: 2.38" w x 2.38" to 2.13" h**
Roof: 11 1/2 x 8 1/2	**138" x 102"**	**Cut Size: 2.13" x 2.88"**
Grandt Line Windows #3722		**Cut Size: .64" w x .66" h**
Door (Scratch build)	**7' x 3'**	**Cut Size: .75" w x 1.75" h**
Window Placement		**1.12" up from floor / .75" from rear**
Deck 16' x 12'		**4" x 3"**

Scale Converter

Scale Conversion Calculator

(use the • Inch2Metric • converter to do any preliminary feet-to-inches, meters-to-centimeters conversions.)

Reference Charts:
- Decimal Equivalent Chart
- Drill Index Cross Reference
- American Wire Gauge Chart
- All three charts combined

Complete Listing of almost all Scales:

Z = 1:220	N = 1:160	TT = 1:120	HO = 1:87 (1:87.1)	1/2 = 1:24
OO = 1:76 (1:76.2)	S = 1:64	O = 1:48(1:43.5)	G = 1:32,1:29,1:22.5	1" = 1/12

Convert from Real-life to Scale

Scale Factor	1:48	Units
Real Size	114 inches	inch cm
	=	
Scale Size	2.38 inches	inch cm
Default	Clear	

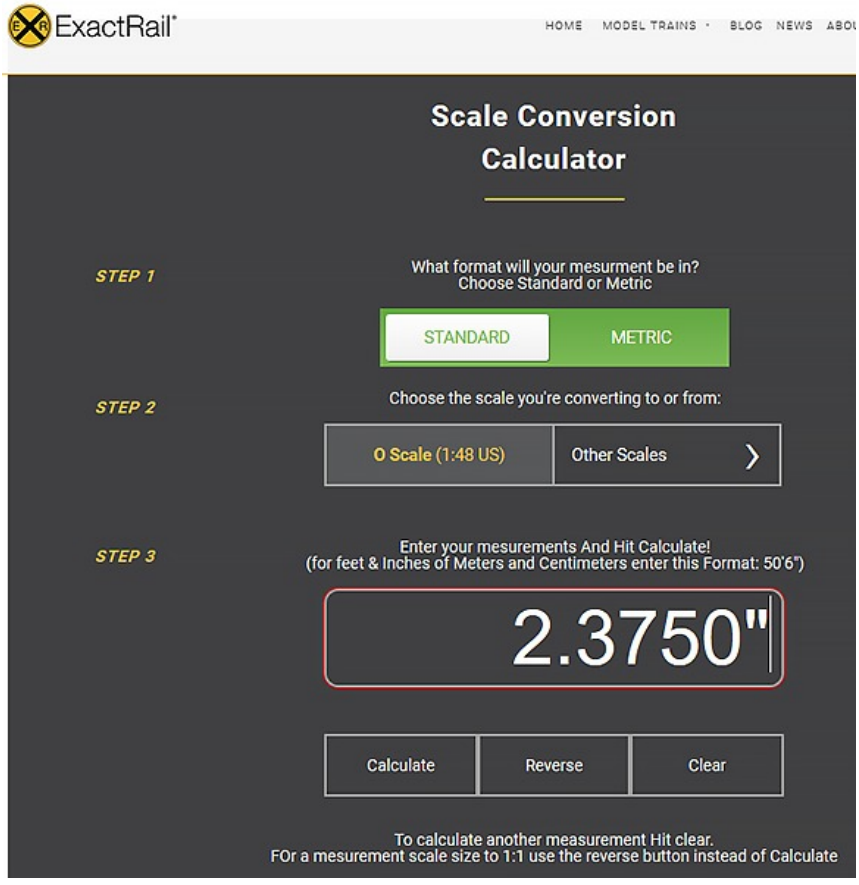
1:48 was selected for US O scale

114 inches was put in (9 ½ tall wall)

Our cut size was calculated to be 2.38 actual inches

The First thing we need to do is try and figure out dimensions of the building. If any of you have better ways of doing this, please let me know. I believe I did a good enough job on this one, but I am sure there may be better ways.

We need to make some assumptions. If we assume the door is 7 foot tall, we then see that the clapboard is 6". Counting the clapboard, we get about 9½ feet tall. Using two clapboards for a 1 foot measurement, we can extrapolate the rest of the dimensions fairly well. Now it's time for some math!



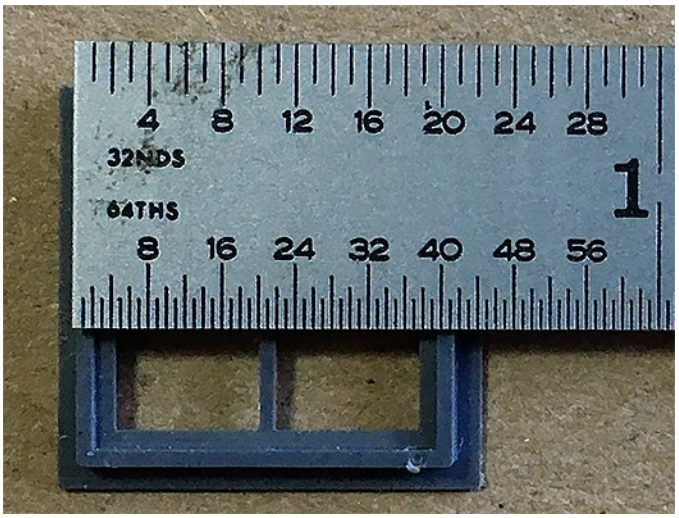
I first converted everything to real inches. Then I cheated and used an on-line calculator: (http://webpages.charter.net/sinkwich/sdventure/html/sd_scalecalc2.htm) to do the conversions.

I calculated all the other measurements, rounding up to two decimal places. Of course after doing all this, I found another website where you could enter the real dimensions and skip the converting to inches. Exact Rail's site here.

Using the Exact Rail calculator I entered 9' 6" and hit Calculate with the result being 2.3750 or rounding up to 2.38.

So if you are not a math wiz, let the Internet work for you!

I am going to scratchbuild the door, so that leaves the window. Looking at my stash of Grandt Line castings I found a small window that would work. Any window is fine as we don't have to be exact in this lesson, but I did want a smaller window – Grandt Line's Number 3722 attic window 4 light single sash. Now we have to figure the cutting dimensions. If you are using Grandt Line and you know the item number, their Website will give you the cutting dimensions. (Tichy is another source for windows castings.)



If you don't know the item number we'll have to measure the opening.

A nice caliper makes this very easy. But if you don't have one, you can measure with a good ruler – I used one that measured 64ths. And got 41/64ths. For reference, I am showing you both. I skipped the math and went to the on-line calculator: (http://webpages.charter.net/sinkwich/sdventure/html/sd_scalecalc2.htm). I put in 41/64 and we the result is 0.64 just as the fancy caliper said. Next, Measure the other side of your window.

So now we have the building dimensions and cutting sizes. Let's get to work. To make things much easier to follow along, we'll use the video of the process. It will guide you through every step of laying out the sidewall design with Apache OpenOffice if you have/want to download it and then also doing everything within the Cricut's on-line software. Apache OpenOffice is developed for Linux, macOS and Windows, with ports to other operating systems. Windows Office has a drawing program, so if you have the full Office suite, you can use that. Apache OpenOffice is an open source program that mimics everything MS Office does and it's free! Many corporations have gone to Apache OpenOffice to save the constant updates the MS Office goes through. Now, you do **NOT** have to download Apache OpenOffice if you don't want to. I will show you how to do everything using Cricut's software. Because of the angle on our side walls, it's less "messy" to do those in Draw, but it can be done in the Cricut software. Again, if you have any other software you feel comfortable with, by all means use it. The idea of this article is if you have this machine in the home already, you can follow the instructions and video to cut a building right away with no heavy learning curve.

While there is one large video, I'll link to parts of it so you don't have to watch from the beginning if you want to watch a specific part again.

The full video is here: **Daisy Cove Milk Station Cut With a Circut Explore Air™ 2**

Create cutting setup for custom materials

One of the great things about the Circuit Design Space software is the ability to add new materials for cutting. The dial shown on the next page has settings for a few items; however, the custom setting will bring up dozens of materials for cutting within the software. It's in this menu that we will add our own material, along with the instructions for cutting. **Click here to watch this part of the video**.

The setting dial of the Cricut is shown on the left set to custom. On that setting, the Cricut Design Studio will bring up all custom materials pre-installed, as well as any you have added.

I would advise doing a Cardstock mock-up to check measurements first before going to wood or styrene. Simply turn the dial to Cardstock using the normal blade that came with the Cricut.

As you can see from the video, I have added 1/16" basswood, .50 card stock, .20 and .30 styrene and more. All of these were added via trail and error as far as the settings were concerned. The video will walk you through this. Below is a screen image of just a few of the custom settings already in the Cricut Design Center. It's where we will add our materials.

One thing that you may not have is the deep cut blade. That is a must. But if you don't have one, you can order it or buy it from Hobby Lobby and other stores. The blade and housing is about $30.00. After that you can purchase the blades only.

Until your deep cut blade arrives, cut out of cardstock and still follow along. In fact, for any project I do, I'll cut out in cardstock first to make sure I did not make a mistake in any of my measurements.

I wanted this part of the video first, but to be honest, you may need to watch: **Import sidewall into Cricut and draw the other parts of the building** so you can draw a simple wall with windows priot to your trail and error cutting.

Heavy Leather – 2 mm	290	5x	Fine-Point Blade	Edit
Kraft Board	290	2x	Fine-Point Blade	Edit
Metallic Leather	295	3x	Fine-Point Blade	Edit
Glitter Cardstock 0.5 mm	299	2x	Fine-Point Blade	Edit
Foil Acetate	299	2x	Fine-Point Blade	Edit
Medium Cardstock – 80 lb	299	Off	Fine-Point Blade	Edit
Poster Board	299	2x	Fine-Point Blade	Edit
Metallic Poster Board	299	2x	Fine-Point Blade	Edit
Light Patterned Paper	300	Off	Fine-Point Blade	Edit
Faux Leather (Paper Thin)	300	2x	Fine-Point Blade	Edit
Foil Poster Board	300	2x	Fine-Point Blade	Edit
Paper, Mulberry Epoxy	303	Off	Fine-Point Blade	Edit
Wood, Birch - 0.5mm	304	5x	Fine-Point Blade	Edit
Deluxe Printed Paper - 0.23mm	306	Off	Fine-Point Blade	Edit
Flat Cardboard	306	Off	Fine-Point Blade	Edit
Transparency	307	Off	Fine-Point Blade	Edit
Sparkle Paper	308	2x	Fine-Point Blade	Edit
Shimmer Paper	308	2x	Fine-Point Blade	Edit
Tattoo Paper	312	Off	Fine-Point Blade	Edit

Drawing sidewalls using Apache OpenOffice draw program

As I stated earlier, I use Apache OpenOffice for quick drawings. In fact, all we will do within Draw is make the sidewall and draw four lines. Refer to the rear wall dimensions in the grid below. If you have a CAD program, then by all means use that. If you do NOT have Draw, and don't want to download it, skip this part. **Click here to watch this part of the video**.

Import sidewall into Cricut and draw the other parts of the building

This section deals with importing the drawing you did in Draw, or any other program, into the Cricut Design Center software. Once it's imported and sized, we go on to placing and slicing the windows from the sidewalls. Then we move on to the front wall with door and rear wall. Again, refer to the grid below for measurements. **Click here to watch this part of the video**.

Drawing the sidewall in Cricut without any other drawing program

If you do not have any other drawing program, and don't want to install any, this part of the video shows how to make the side walls within the Cricut Design Center software. The reason for a draw program is that the side wall angles down on the rear. Making angles in Cricut Design Center software is kind of messy as you will see for our small building, but we can make it work. Again, refer to the grid below for measurements. **Click here to watch this part of the video**.

The difference between a partial import and all drawing within Cricut

The Cricut Design Center handles imported items and drawing within the programs a bit differently when it comes to the final cut. I wanted to show this so no one would get confused. **Click here to watch this part of the video**.

Time to cut our building with the Cricut

Here we actually cut our clapboard siding in real time. We load and start the Cricut.

That's all there is to it. You really need to view the video sections to follow along. Watching video without the article won't work well. If you send the video link to a friend, be sure to also send the magazine link or they may be totally lost. I thought it would be too complicated to try and use still screen shots for everything, hence the full video. I am not an expert with this machine, but if you have any questions drop me an Email and I'll try to help you out. There are also many good videos on the machine in general so search the Internet for those.

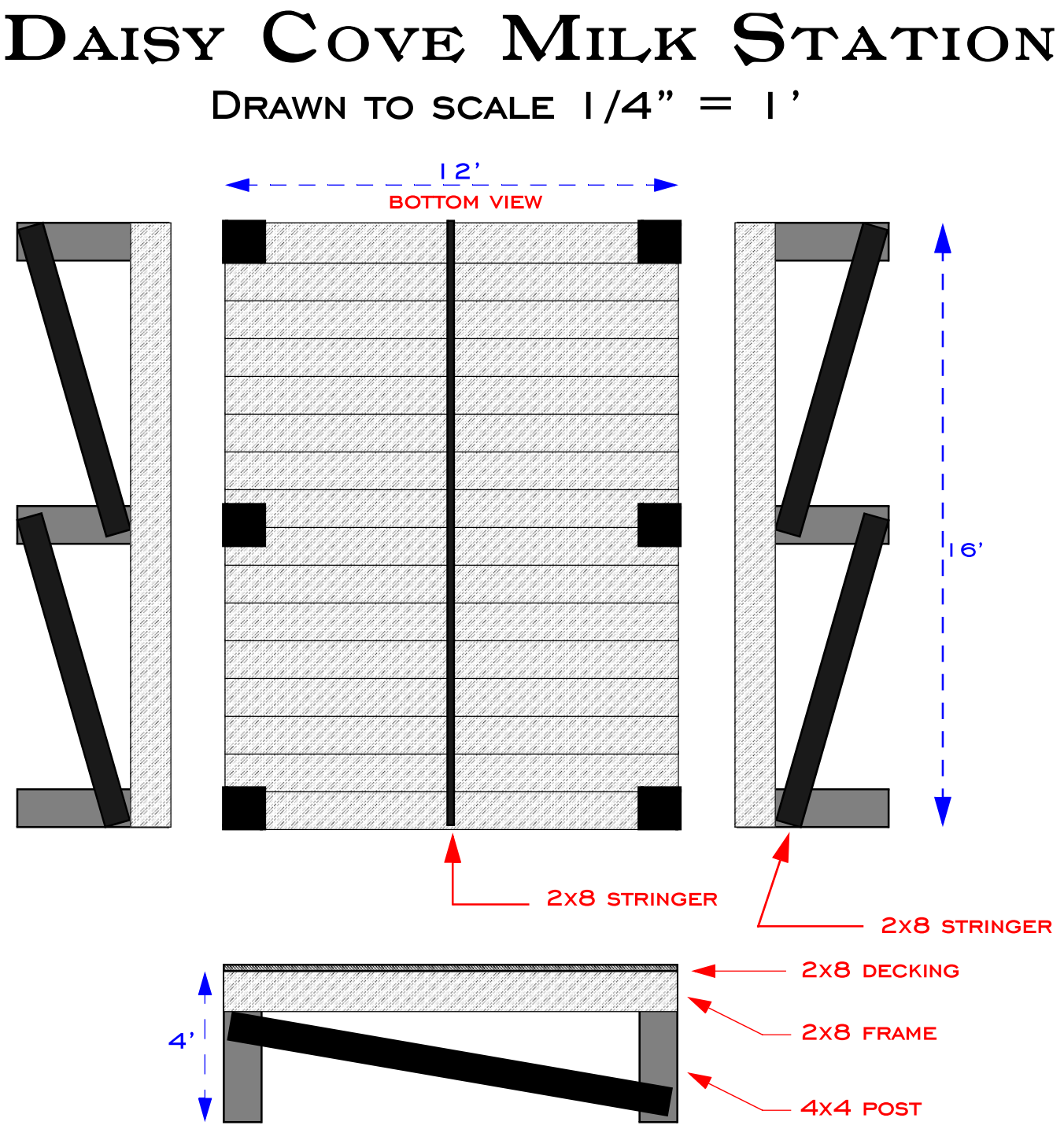
For How-To Videos from Cricut: http://help.cricut.com/video-tutorials

Real Dimensions	Real Inches	1/48 Cut Size
Front wall: 9 ½h x 7 ½w	**114" x 90"**	**Cut Size: 1.88" w x 2.38" h**
Rear wall: 8 ½h x 7 ½w	**102" x 90"**	**Cut Size: 1.88" w x 2.13" h**
Sidewalls: 9 ½h front to 8 ½ rear h x 9 ½ w	**114" / 102" x 114"**	**Cut Size: 2.38" w x 2.38" to 2.13" h**
Roof: 11 1/2 x 8 1/2	**138" x 102"**	**Cut Size: 2.13" x 2.88"**
Grandt Line Windows #3722		**Cut Size: .64" w x .66" h**
Door (Scratch build)	**7' x 3'**	**Cut Size: .75" w x 1.75" h**
Window Placement		**1.12" up from floor / .75" from rear**
Deck 16' x 12'		**4" x 3"**

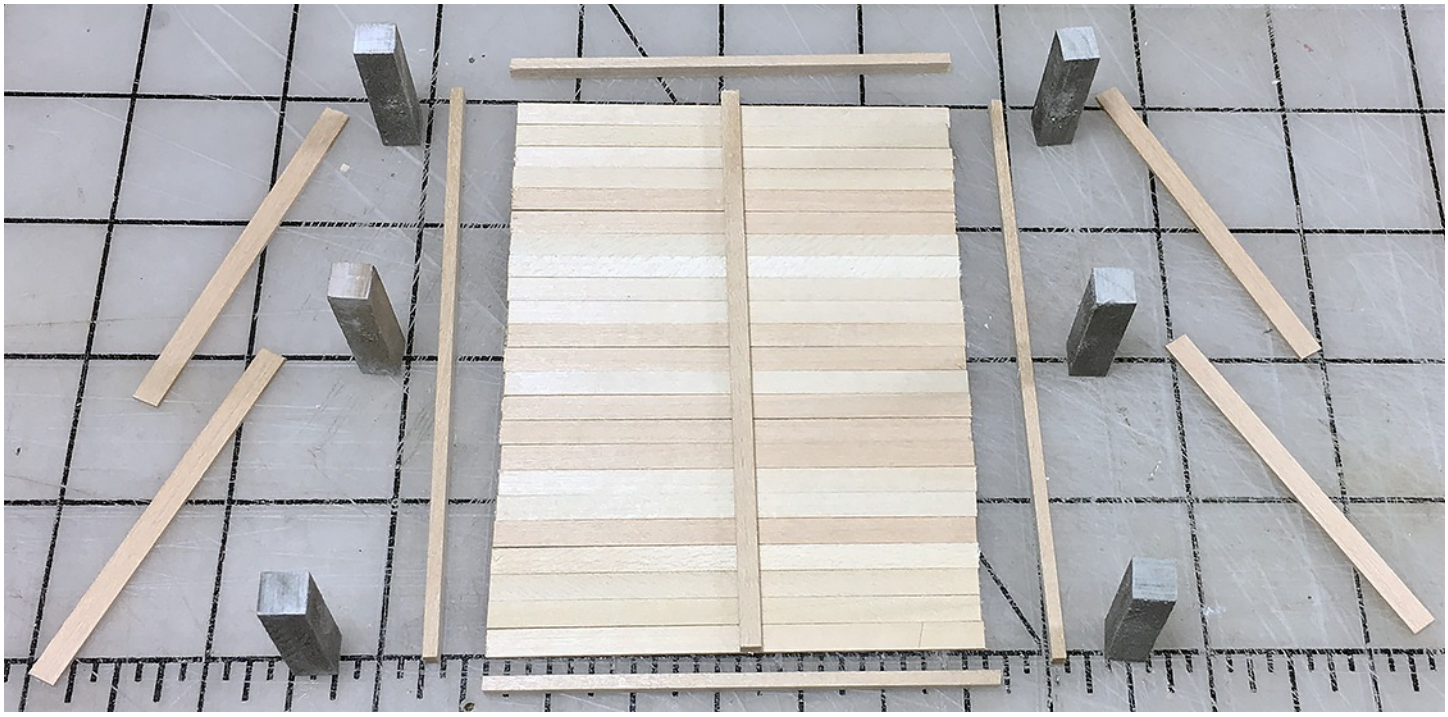
Above are the dimensions used for the drawings and cutting. ***NOTE that on the video, I reversed the window measurements. I found that in the cardstock mock up and corrected for the final cut; however, this mistake is still in the video.***

Now we'll finish off the milk station itself and build a deck for it. If this were a contest model, I would add in interior or at least frame inside, however, the windows are small and the door will be closed, so I'll skip that here.

The deck is straight forward and the plans are below.

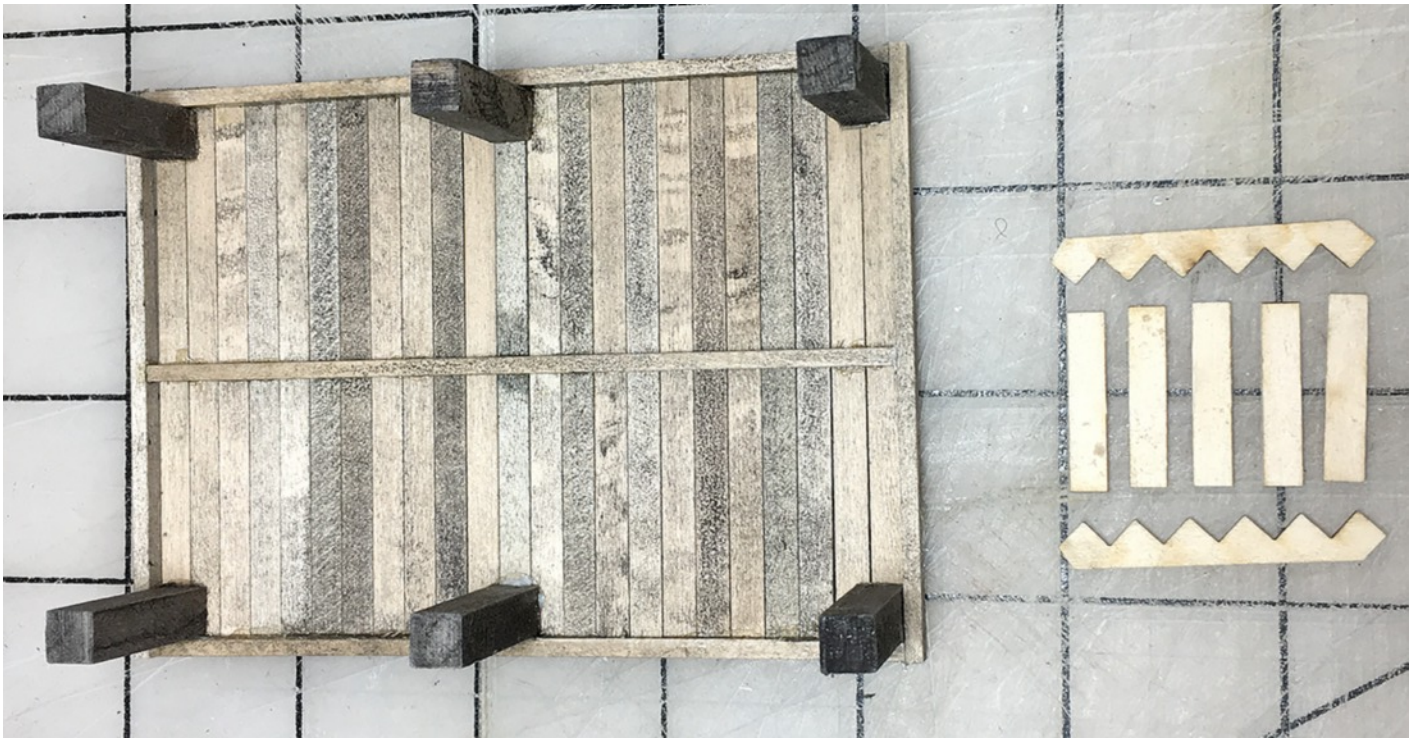


Below are the parts cut, laid out and ready for assembly. The 4x4 posts were in my scrap box and the dimensional lumber came from my “lumber yard” stash.



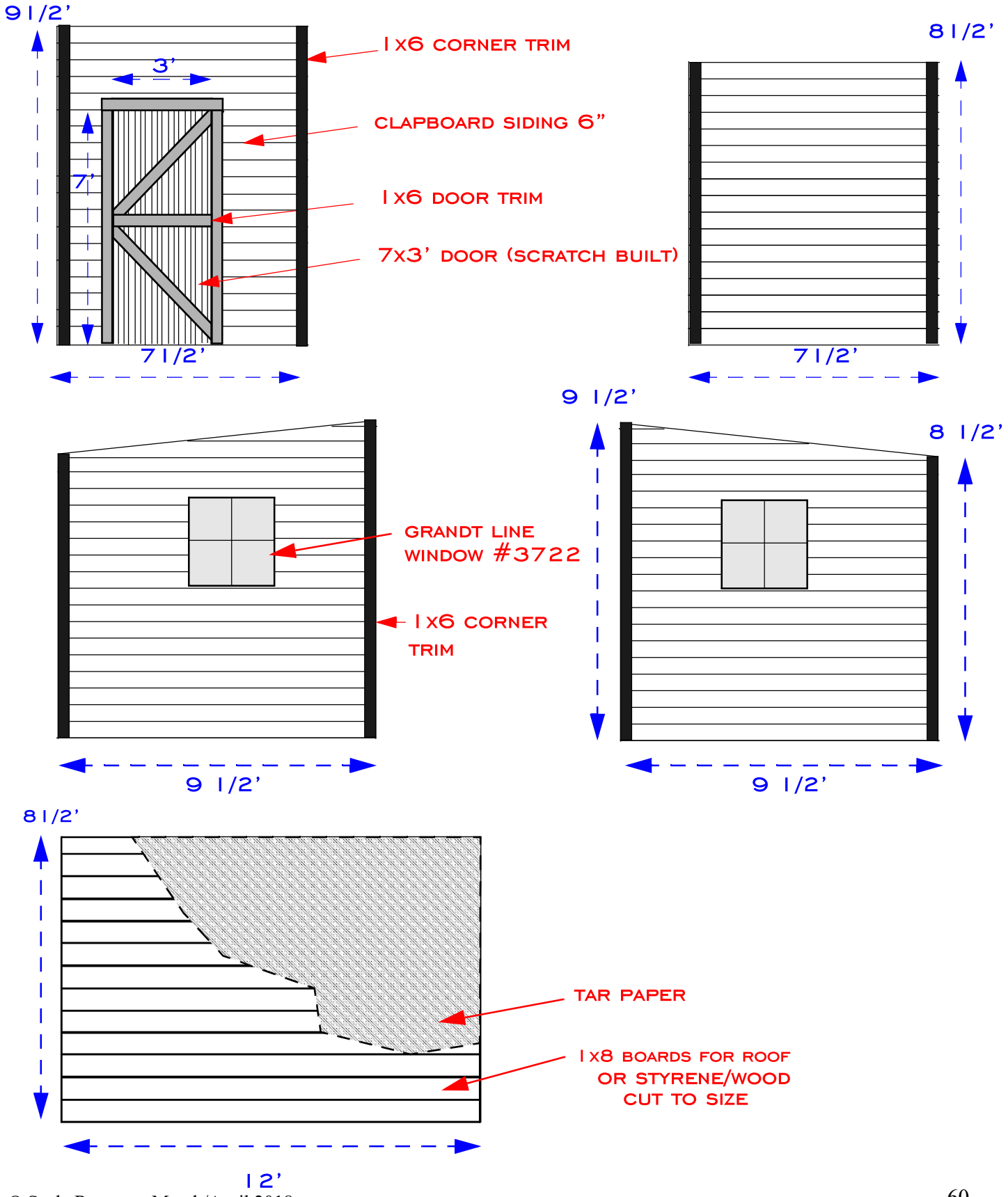
First, I stained all the wood using 91% isopropyl rubbing alcohol and India ink. I have a few bottles made up with different amounts of ink for lighter or darker staining. Once dry, I lined up the deck boards and glued the center stringer to them and then added the side stringers.

Next, The 4x4 posts were added. For the stairs, I used some laser cuts I had. I hate making stair stringers. Side stringers were added, and then I also added some nut/bolt castings.



Daisy Cove Milk Station

Drawn to scale 1/4" = 1'

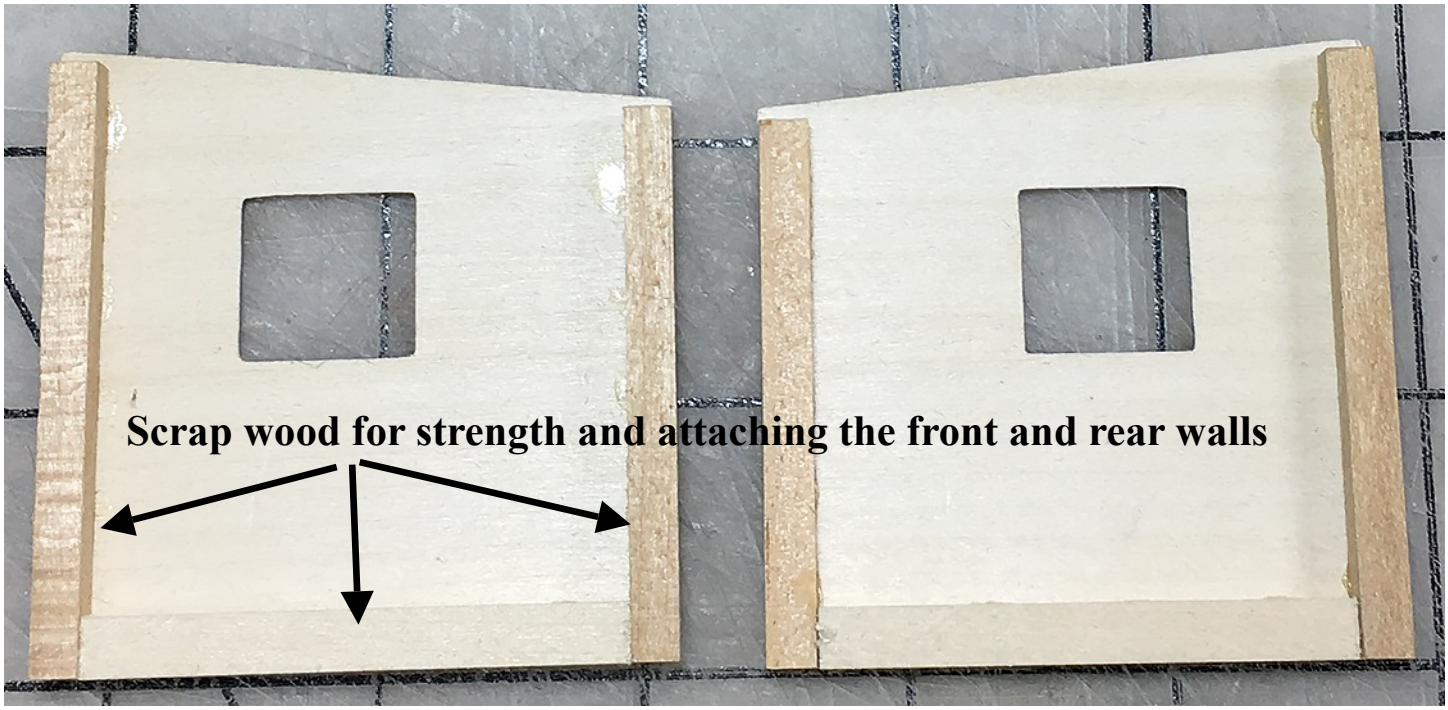


Now we'll put together our building. One step back here, I did the first cut out of card stock. I would always recommend this so you can check the parts, make sure there was no mistake in measurements and that the windows fit. The card stock mock up is on the left.

Below is our material with the building parts cut out and ready for assembly and painting.

Because there will no interior, I used some scrap wood to line the sides and bottom of the side walls. This will give us the extra strength we need, and although I have not had wood warp from spray paint, it will help if you use a water based paint.

The pictures on the next page show this step in construction. Once the sides were glued together, I continued with the 1x6 corner trim. Some 1000 grit sandpaper took care of the "fuzzys" from the wood, and it's ready for painting.


Scrap wood for strength and attaching the front and rear walls

After coat of primer. The "fuzz" is once again removed with fine sanding.

I sprayed the raw wood with Scalecoat II UP Hopper Car Gray as a primer, and did the same with the separate window castings. Once dry, I again removed the "fuzzys" and rubbed parts of the wood with Elmer's No-Wrinkle Rubber Cement. This will allow us to achieve a peeling paint look. Once that was dry, I sprayed the building Scalecoat II White and the windows Scalecoat II Green.

For the roof I tried a product I have not used before, Evergreen Metal Roofing. It may be a bit fancy for a building of this type, but I wanted to try it. The roof was sprayed with some Old Railroad Silver I have from my stash of Floquil paint. I also made a roof from wood and tar paper.

After the white paint dried, I rubbed the areas with the rubber cement and the white flaked off leaving the under primer showing through. I did the same with the windows.

For the roof I used fine steel wool to flatten the look and attached a very thin veneer of wood on the bottom since these were laid on a wood base.

I cut the window panes out of .05 clear styrene with the Cricut. (Another great use for that machine.)

Above left: Building after rubbing off the white paint.

The pictures on the next pages show the final result. The Cricut is a tool and some may not want it; however, in scratch building, I think you can see many uses for it. The windows were a big thing for me I got a perfect fit in any material and they lined up properly on the building side. Stencils for lettering on building sides is also another great use for the Cricut. We'll go through other uses in future issues. If you have used one of these machines, send us some photos of your projects.

Although the metal roof looks good, it really does not fit the era for this small building. I went back and cut a piece of 1/16 wood with the Cricut, and then added 3M Micropore Surgical Medical Tape for the tar paper and painted.

Canadian National Railways Sanmore Subdivision

Building my Dream Workshop

By Serge Lebel

If you are like me, your modeling involves a certain amount of tinkering. Some modelers will tinker more than others, and I fall in that category of modelers who just love to scratchbuild something even if it is commercially available, just for the satisfaction of building it from raw materials. So it is only fitting that for my personal enjoyment of the hobby, my workshop is just as important as my layout. In fact, I built my workshop two years prior to starting on my layout.

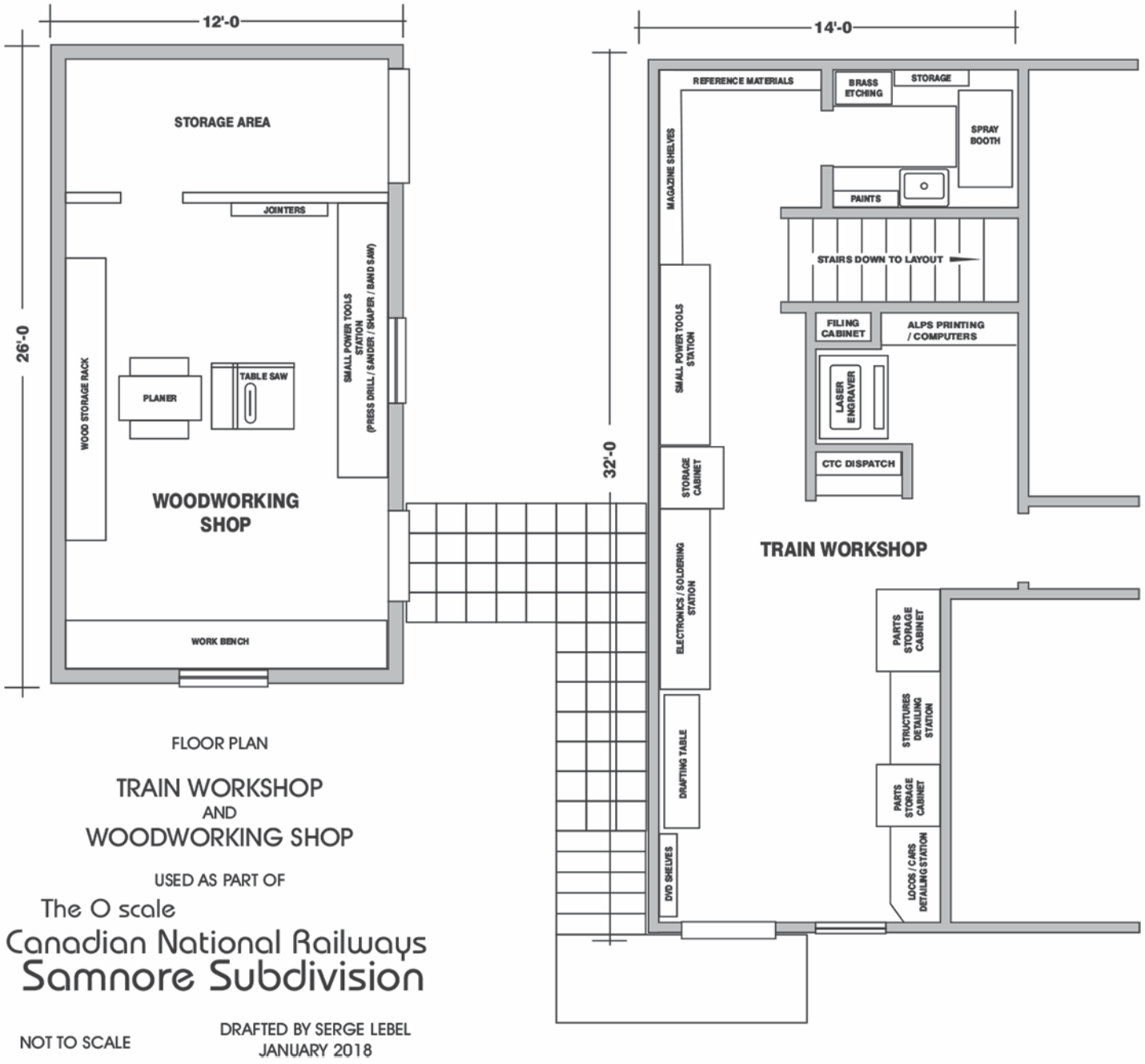
My workshop is located on the main floor of my house and occupies a room that measures 14' x 32'... not counting the woodworking shop (measuring 12’ x 26’). I had the luxury of designing my own house, with no real size restrictions (as long as I could afford to pay the mortgage!). So in designing my floor plan for the house, I knew (based on a previous house I had designed and owned for 10 years) that I wanted my workshop to be on the main floor, and have it's own entrance from the exterior. My access to the layout needed to be directly from that workshop, and so would the woodworking shop. This way, everything related to the layout is directly accessible, and visitors can access the workshop and layout without going through the house. This would also allow for at least one large window for plenty of sunlight and fresh air from the nearby woods and oceanside. But the most important and best feature of this design is that it does not cut back on any precious layout space in the basement.

My ideal workshop was inspired by an article in a magazine I found about 40 years ago. The modeler in question had designed and built his dream workshop with several small departments, each having a special purpose and tools. At 10 years of age, being a new model railroader, I was immediately struck with how much impact having a workshop would have on a model railroader's enjoyment... Even if I did not have a single tool or know how to use them. It just made sense! I also wanted my workshop to be a happy and creative space. I painted some walls a vibrant yellow, and finished all my cabinets with an antique look to recreate the feeling of an old railway station. I decorated my walls with some of my own artistic country style creations. Over my fourty years of modeling, I managed to acquire a good selection of tools which have fortified my personal enjoyment and skills. Drawing from that inspiration, I designed my workshop by separating the room in small work areas. Here is the list of departments I wanted:

- Research and design
- CAD drawing / laser cutting and engraving
- CAD drawing / decal printing
- Brass etching / Spray booth / paint area
- Small power and hand tools
- Electronics
- Assembling / detailing station

In addition to all these small areas, I knew I would have to find a place for my CTC machine, since my layout is designed for operation. The CTC simply had to be away from the layout so radio communications would have a greater effect on the realism of my operations. I soon realized this was a tall order for the space I had. But instead of eliminating any department, I decided to do my best to combine some departments.

Here is my workshop area floor plan design:



As you can see from this plan, my design includes a woodworking shop. For obvious reasons, that shop is separate from the house, but has very close and direct access with the rest of my work spaces. Having a woodworking shop is not a must for building a layout, but it sure is a great bonus! This allowed me to build all my cabinets for the workshop, and also allowed a nice space to prepare all my benchwork for the layout.

This will also provide a nice area for the bigger power tools for O scale scratchbuilding, like a metal lathe and a milling machine (future purchases). Having the woodworking shop also allows me to have a space for the "dirty" and noisy work and keep my workshop clean and dust-free, which is a must for fragile, calibrated tools like the laser engraver and the Alps printers. Here is a general view of the workshop as it stands today. I still have some adjustments to do in some areas, but for the past four years, it has proven to be an effective design.


Scale Models Division


POSSIBILITIES

Now, let's take it one department at a time and look at the use of each area.

► **Research and design:** This is one department that is unfortunately all over the place. If I had an infinite amount of space, this would be in a separate room. This is one department that requires a lot of wall space, since I wanted to display as much of my reference materials as possible to avoid wasting time looking through boxes or drawers. I started buying model railroading magazines in 1981 and never stopped. But technology has changed the information media, and DVD's and on-line formats have reduced the amount of space needed for such information. Still, my books and magazines are what I refer to the most when looking for a plan, a technique or for inspiration.

Being a draftsman was my very first trade when I started working in civil engineering in 1988, so I draw plans for just about everything I do. My good old drafting table still sees a lot of action for scratchbuilding structures, track planning and woodworking projects. But when it comes to laser cutting, brass etching or decals, I do all my design on the computer.

► **Laser cutting and Alps printing:** Here is a good example of having to combine a couple of departments in one area. I have four computers, each driving a different device. This is due in part because some devices are older than others and use a different version of Windows, while other devices need a different connection to a computer. In this area, I set up all my computers at the same place and wired them to the same screen, mouse and keyboard via a data selector. Computers drive one of each of these four devices : Laser cutter, Alps printer (MD5000), Alps printer (MD1500) and a vinyl cutter used in sign making. All of this is crammed up in one small area, but I usually store the vinyl cutter away when not in use to free up space.

► **Brass etching:** This is a combination of home made devices, household items, and computer files. Again, I had to combine this department with the spray booth area since I needed to have a dark room for the brass exposure, and it was fitting well since both departments needed access to running water and a closed space vented outside for fumes. I think that even if I had more space, these two departments would still be in the same area, just a little bit more spaced out with more counter top!

► **Various work stations:** Small power tools and hand tools, electronics and detailing stations are scattered around in the workshop. These were designed around the available space left after building my cabinets, and located in proximity to the appropriate content of the cabinets. This is where I still have a lot of work to do. For the moment, my cabinets are mostly filled up with stuff that will be either sold (my former N scale collection) or rolling stock not yet converted for the O scale layout. Eventually, I will empty these spaces and use them to shelf all my scratchbuilding materials. Having a cat and two small dogs in the house means I can't leave anything on the workbench even for a short period of time. I also have to tape shut all small drawers because miss kitty loves to open up drawers and play with my detailing parts! My projects in the works always find a place in the cabinets while I am not working on them, and that requires some free space also. I think that eventually, the structures will be too large to keep in cabinets and will have to be stored on the layout between work sessions. This is already the case with a bridge I am currently building.

Above: The beautiful, drawer opening, Miss Kitty

Left & Below: Structures Detailing Station

Left: Rolling stock / loco detailing station

Below: Eectronics/soldering station

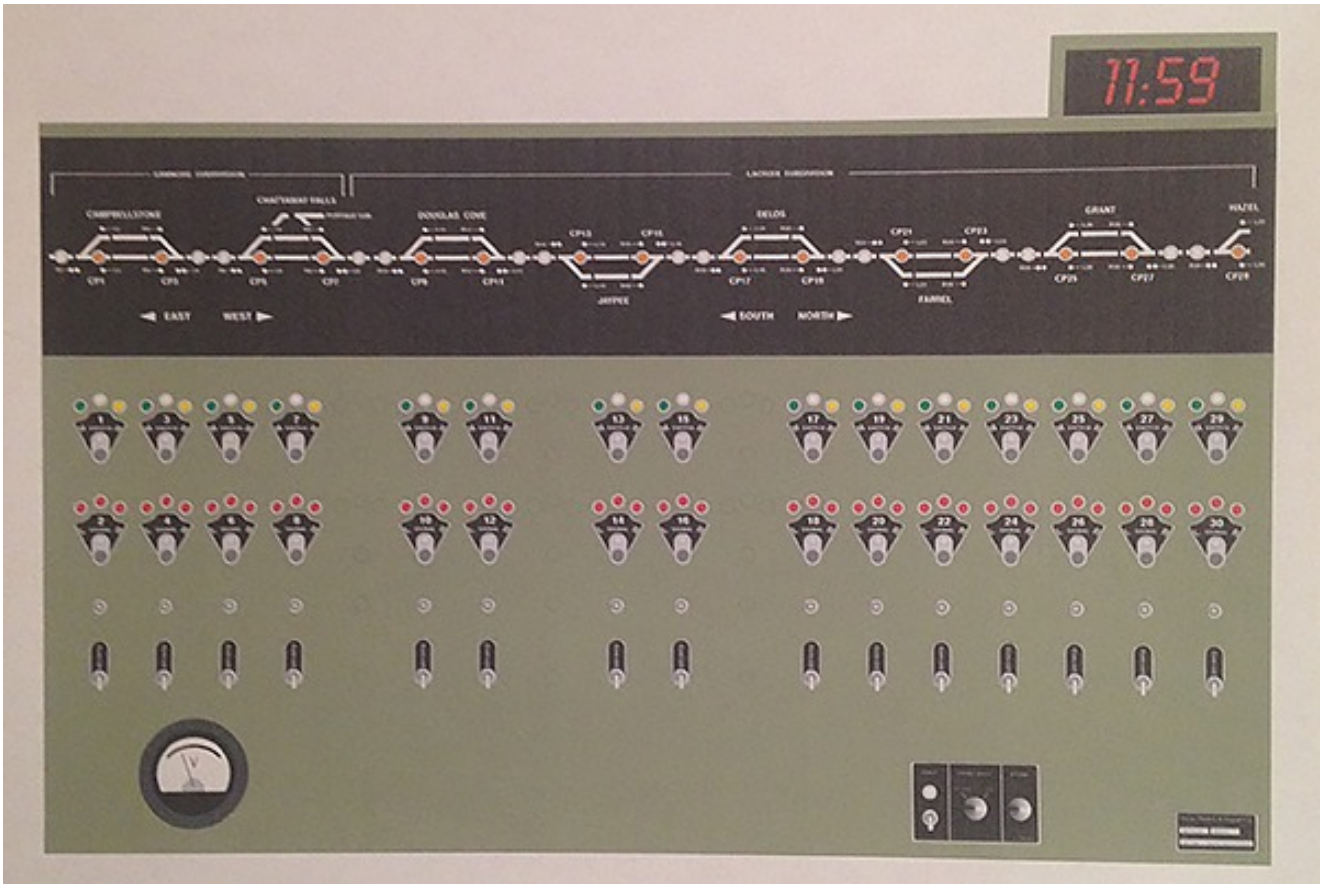
Above: Small power tools station

Left: Various file storage are scattered all around the work stations for easy follow-up on projects.

Just like a layout, I think a workshop is never finished. It evolves with your needs as the layout progresses and some projects are completed while others are just getting started. Such is the case with this small area, which was originally designed for the vinyl cutter, sign software computer, and vinyl rolls storage. It was just recently modified to accommodate the future CTC machine, and I started to run wires from the layout to the designated area shown here...

So as each phase of my layout progresses, my workshop too will see its share of transformations over the years. Again, this is one man's opinion and desires, and it is not by any means a benchmark to reach or an obligation to have in order to fully enjoy this wonderful hobby... But if seeing this inspires you to find a little space for your dream workshop and get to building it, then I am honored and humbled to have served this purpose.

Here is a print of my design for the future CTC machine to be built and installed as the tracks and detection on the layout nears completion.



BUILD AN EARLY STEEL DROP BOTTOM GON

By George Paxon

The first form of transport for coal in southwestern Pennsylvania was by canoe I understand. In the late 1700s to early 1800s, a few enterprising frontiersmen would load their canoes with what coal it could hold, I would guess not much more than 100-200 pounds, and paddle it down river either for his own use or to sell to some other homesteader, blacksmith, or individual in need of the material. This primitive and inefficient transport method soon gave way to loading coal on rafts or very shallow barges and delivering it to users. This method was used to float coal down the many rivers to the early settlement of Pittsburgh. The new town could use all the coal that could be delivered. The first railroads in the area put some rough planks on the sides of flat cars and loaded them with coal. Next came flat bottom gondolas, gons, that were built with tight strong sides and made expressly for the purpose of hauling mineral products such as coal. As the volume of coal and the cost of labor increased, it became apparent that using an army of men to shovel the coal out of the flat bottom gons was not a brilliant idea. Gons were then fitted with drop doors in the floor. When these doors were opened, most of the coal would run out by gravity. Men were only needed to scoot the coal remaining in the car ends toward the doors in the floor so it could be unloaded. The drop bottom gons soon developed into self-clearing cars we call hoppers with sloped floors where all the contents could be discharged when the doors were opened.

The usefulness of the drop bottom gon was not extinguished by the introduction of the hopper, however. Drop bottom gons continued in service into the 1960s for all sorts of products, and probably some are still around today. As well as being used for coal and other mineral products, I have seen drop bottom gons used for grapes and sugar beets, and I am sure they have been used for other products also.

The early gons were of all wood construction. Wooden gons were still being manufactured well after 1900. But, even before the turn of the century, some progressive railroads began to look at a new construction material called steel. Railroads have been, and still are, a very conservative industry and seem to adapt to change and technology very slowly. Early experiments saw the introduction of some steel in car underframe members such as the sills and bolsters. After some experience with the new material, the complete underframe was built of steel. But, the floor and bodies remained made of wood.

Some early steel companies began to look for new uses for the steel they were making and rail freight cars came into their sights. Several firms associated with steel companies built a few cars totally from steel. These cars were sent out for testing on various railroads. I think the first all steel car in the late 1890s was a hopper, but steel was tested on other car types as well.

Around 1900, American Car and Foundry built a batch of all steel drop bottom gons for the Pittsburgh Coal Company and at least one of its subsidiary railroads. They were a most interesting and novel design for the times, as most gons were still being built of wood or part wood. I thought one of these early steel cars would make a nice addition to my car fleet.

I have builder's photos of these cars lettered for both the Pittsburgh Coal Co and the Pittsburgh and Moon Run Railroad. See page 10 of the General Views section, Figure 37, in the 1906 Car Builders' Dictionary for the Pittsburgh & Moon Run version of the car. This road was a coal company owned shortline operating on the northwest side of the city of Pittsburgh. Later, it became part of the Montour Railroad. The Montour itself was a small local shortline that operated from north of Pittsburgh in an arc down the west side of the city and terminating just south of the city. It too initially belonged to a coal company, but eventually became the property of the Pittsburgh & Lake Erie Railroad, an also relatively short, but very busy railroad, and at one time a most profitable part of the New York Central System.

I have seen one photo of these cars lettered for the Montour; so they survived the transfer of the Pittsburgh and Moon Run assets to the larger road.

I am a period modeler. I model traction set in southwestern Pennsylvania sometime in the 1930s. But, my Mountain Electric Ry moves considerable freight as well as people. I would like to think some of these early steel cars lasted into the 1930s and feel they are appropriate for my layout.

The story line of my ME Ry is that it was cobbled together just after 1900 from a group of insolvent and unconnected small town trolley lines with some new construction to connect them together. The small trolley lines were purchased on the quiet with money from Pittsburgh Coal Company and the new track constructed. This approach was used by Pittsburgh Coal to invade the territory east of the Monongahela River that, for the most part, had been controlled by the Pennsy and the H. C. Frick Coal and Coke Company. Pittsburgh Coal wanted to build a steam railroad into the area for some years to develop coal deposits it owned there, but political influence from these other firms made it difficult. Strapping together an electric railway was going in by the back door so to speak. By the time the Pennsy and Frick figured out that Pittsburgh Coal was behind the ME Ry, it was too late. Well, that is my story and I plan to stick to it! And, having an original Pittsburgh Coal Company gon on the layout only helps to strengthen the plot of my story.

Figure 1 is a drawing of the car. (Figure is also reproduced larger for printing at end of article) I drew this from photos in the 1903 and 1906 Car Builders' Dictionary and from drawings of similar cars. Photo 1 is of my finished car ready for service on the ME Ry. Photo 2 is an AC&F builder's photo of the prototype.

Figure 1

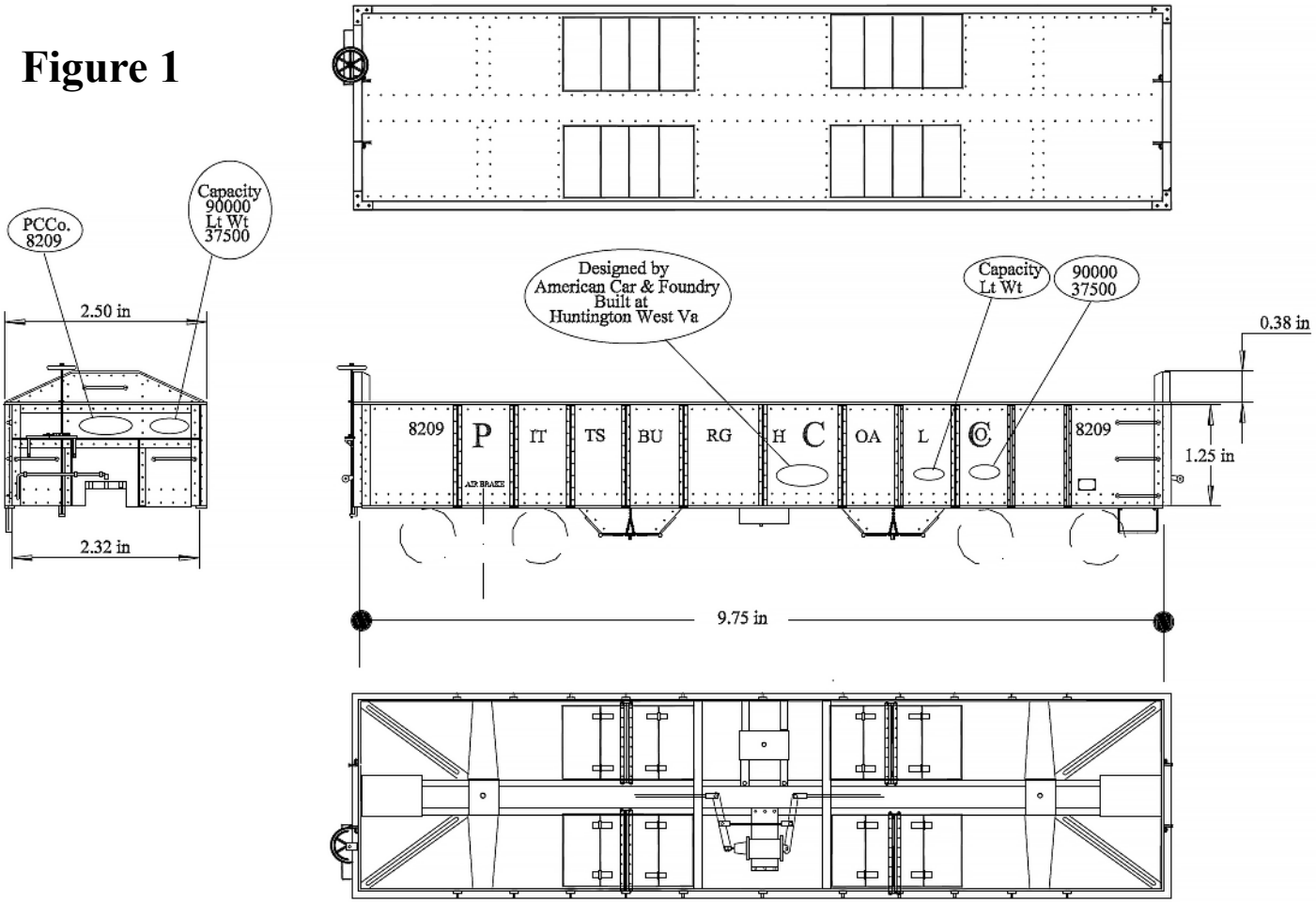


Photo 1

Photo 2

This photo obviously came from the AC&F archives, and I purchased it many years ago from a Mr. Frank M. Ellington of Iowa. I have attempted several times to contact Mr Ellington to obtain use permission, but have had no response to my inquiries.

One of the first things I decided was that my car would be modeled as loaded. So, I started construction by making a coal load for the car. The car then could basically be built around the coal load. Well, sort of. Due to the peaked ends on the car that we'll talk more about in a minute, I first made the coal load a rectangular block and higher than the car sides and with a flat top. My plan was to use the coal load as a stand on which to build the car.

My material of choice for car construction has been styrene for many years now. It cuts, glues and finishes so nicely that it is hard to pass up. Occasionally I drift back to wood or brass for one project, but seem to always find working with styrene easier, faster, and more rewarding. But to each his own.

Another consideration is that having the car loaded would allow me to use styrene materials of near scale thickness. If the car were built empty of scale thickness styrene, it would be quite fragile. I build my cars to operate so I like them to withstand handling by "ham handed" and uncoordinated fellows like me.

And of course there is the weight issue. An empty car built of styrene would be very light and would require some ingenious approaches to adding weight to bring the car up to an acceptable level. Not an issue with the bloody great chunk of wood under the load in my car.

One feature that makes the car somewhat unique is the peaked ends. These ends were found on quite a few hopper cars beginning in the 1930s, I think. They certainly were still around in the 50s and 60s when I was

rail-fanning in the eastern US. They were mostly used on cars of the C&O and N&W. The L&N had some peaked hoppers as well. Not sure what other roads used them. I never saw a Pennsy car with one, but I understand there were a small lot of hoppers in the H2A class that were leased from the N&W with peaked ends in the 1956 to 1966 timeframe, and during that time, they had Pennsy reporting marks. The peaked end feature was not common on gons. Matter of fact, this car and a few similar of the same vintage built by AC&F, are about the only gons I know of with a peaked end. For those of you from the Midwest, the AC&F built a series of very similar gons with peaked ends for the C&EI at about the same time, and the Car Builders Dictionary has reasonable photos of them as well. They were slightly heavier cars rated for 55 tons.

I have run across photos of N&W gons with the peaked ends, also. Car numbers for these in available photos ranged from 88658 to 94199 with the photos all dating to 1934. The N&W cars do not have drop doors, but they were rebuilt in 1924 and the doors could have been removed at that time. The end sill was also a much more modern cast affair which could be the result of the rebuilding as well. The N&W cars could have also been AC&F products as construction appears otherwise identical. While trying to track down the linage of these N&W cars, an individual from the N&W interest group told me that the cars were built by the Roanoke Shops though. As a result of my research to date, I am not sure the N&W cars are AC&F products, as counterfeiting car construction designs was probably common in the early years. There may have been other gons with peaked ends as well of which I am unaware. It would be good to hear from a knowledgeable N&W fan regarding the history of the cars mentioned above.

The idea of the peaked end on a car was that the coal, or other mineral products, could be heaped all the way to the car end without fear of spilling while in transit. This added some additional cubic feet of capacity to such cars.

My idea was that having the high wood block inside the car would protect the peaked ends from damage during construction, particularly when building the underbody when the car was upside down. This idea seemed to work well for this project. And the same block could be trimmed and shaped later to form the basis of the coal load. When finished with the body construction phase, I whittled the top down and into four pile shapes, gave the top a good coat of glossy black paint and sprinkled on some coal. When dry, more coal and white glue was used to make a realistic coal load.

With the block cut to size, I went about building the styrene body. It was sort of an open top box with bottom, sides, and ends. I used 0.020 thick styrene sheet for all this. If you fancy building the car as empty, you will need to add the four rectangular holes in the floor for the hoppers. Not a problem for me with my wood block load. I made the floor without holes.

Car Body Construction

The prototype car was built of sheet steel, standard steel angles, and top hat section steel side stakes. This arrangement means there are no serious dramas for the modeler.

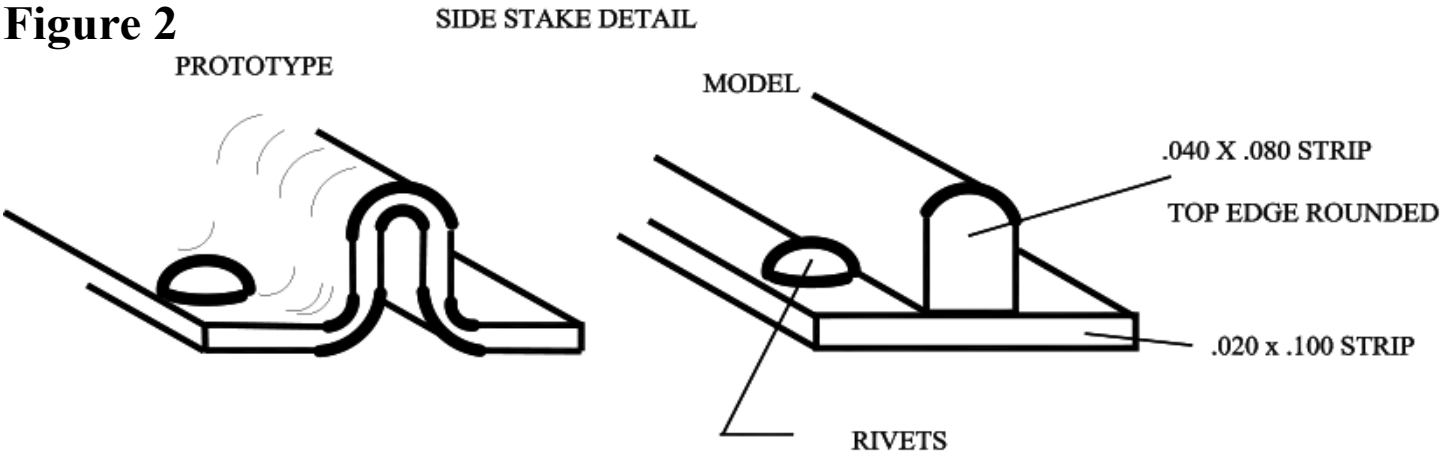
For the top angle, all around the top edge of the car to include the peaked ends, I used Evergreen .125 angle stock. The vertical leg of the top angles is on the inside of the car so the horizontal leg sits on top of the car sides with the horizontal leg protruding outward. The corners of the top angles were cut at a mitre as it would look better. The transition between the horizontal sides and the peaked ends requires a bit of fiddling around. This was made more difficult because of the angle across the outside of the end which also meets at the top corner of the car. I probably could have done this better on my car. If doing it again, I would have brought the horizontal end angle into the side angle then let the sloped end angle sit on top of the other two. As it is, I have the horizontal end angle slightly below the side angle because I applied the sloped end angle first and there was no room for the horizontal end angle. If I ever build this car again, I will know better. I actually made another set of decals for a second car to be lettered for the Pgh and Moon Run, but with all the other cars on my "to build" list, that probably won't happen. Plus, I find it somewhat boring to build the same car twice.

The corners of the car, the vertical joints where the side sheets met the end sheets, were covered with vertical angles as on the prototype. I found using separate pieces of 0.020 thick strips worked better here as Evergreen angle stock was thicker and looked it. If you take care, you can make the joint between the two strips almost invisible and it will look much like an angle.

Horizontal and vertical angles were used on the car ends as shown on the drawing. These were done with .100 Evergreen angle stock and they looked OK here. These angles were smaller as they sit on the outside of the car, while the top angles sit over the top of the side and end sheets and extend down into the inside of the car.

The side stakes on the prototype were pressed top hat sections. I modeled this top hat in two pieces. First I applied vertical strips of 0.020 x .100 where each side stake would go. They need to be dead vertical or they will look hideous. I used a small square and marked the position in pencil for each side stake and then applied the strips along the pencil lines. Once the strips were dry, I made the rest of the top hat from .040 x .080 strips with one edge sanded to a semi circle as per the top hat shape. These were then carefully glued centering them on the side stake strips, the first parts applied. To make this easier to do, I cut all the strips just slightly longer than required, glued them in place, and, when good and dry, sanded them flush with the bottom of the sides. See sketch at Figure 2.

Figure 2



The bottom of the sides on the prototype has an angle as well. The vertical leg of the angle was inside the side sheet and the horizontal leg protrudes outward under the side stakes. I modeled this by placing a .020 x .125 strip along the bottom edge of the side sheet. To make these strips more secure on my model, they were also glued to the bottom of each side stake as well as to the bottom of the side sheet.

You will also notice that there were two vertical angles on the inside of each car end. I added these of .100 angle stock as well. First I removed the wood block used as the stand, installed the angles, and then discovered the stand would not fit back into the car. I had to cut two grooves in each end of the wood stand to clear the inside angles to put it back in place. Planning sometimes lets me down.

Under Floor

The were no drawings to provide much help on the underfloor framing, so I made it up based on common practice.

I placed my usual ¼ x ¼ inch length of key steel between two center sills made of Evergreen ¼ inch high channel stock. The key steel was drilled for the truck mounting screws. The key steel was cut to length to

just clear the coupler box locations. The key steel was really overkill for this car as it is quite heavy due to the coal load. The two ¼ inch channels were glued to each side of the key steel and the whole works glued to the underside of the floor. A pad made of .060 styrene sheet was provided for mounting the Kadee coupler box at the end of the center sills.

The car bolsters were made from some .040 x .250 strip tapered to suit, notched to fit into the center sill, and glued to the underside of the car floor. These were then covered by a plate made from .020 thick styrene that extended from one side sill passing over the center sills, and extending to the opposite side sill. Light cuts were made in the plate to allow the plate to take the required shape where it bent at the outside edges of the center sills. See sketch in Figure 3**.**

Similar to the bolsters, lateral beams that extend from the center sill out to the side sills were made from some .020 x .100 and .040 x .250 strip as shown on the sketch on Figure 3. These need to be placed to avoid the footprint of the soon to be installed hoppers though. The prototype probably had more of these than I used.

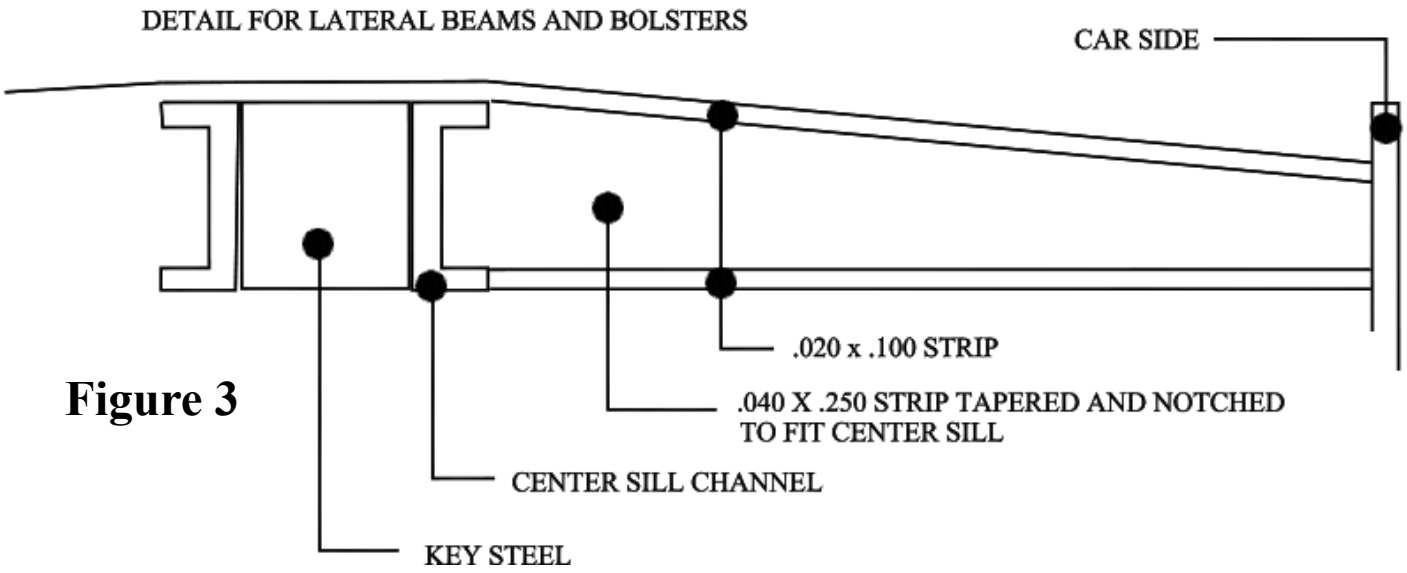


Figure 3

Most cars have braces that extended from the truck centers at an angle to the car corners. I made these from some .020 x .100 strip with a .040 x .040 strip on the top. This top strip was rounded on the top and ends so that when applied to the center of the first strip, it resembled a pressed top hat section. These are much like the top hat section side stakes but with the ends as well as the top rounded. See sketch in Figure 2 to help you understand this.

Hoppers

The four hoppers were each made as sloped sided boxes from four pieces of styrene. The “doors” were one piece of styrene glued to the bottom of each box with angles at the edges where the doors opened. Each hopper had two doors that met at the center, but the joint between the doors is masked by the angles, so for simplicity I made them of a single piece of styrene.

Doors were then hinged to the hopper slope sheets. I made the hinges of styrene strip with a short length of round styrene rod at the joint to serve as the hinge pin. There were four hinges on each of the four hoppers.

When complete, the four hoppers were glued in place on the underside of the car floor.

One thing to note. You can see on the photos of my car under construction there are upside down “Y” looking bits on the sides of the door. As the photos are poor, I modeled what I thought was there. After studying

photos of other similar cars, I have come to believe that what this should be is two chains leading upward from the angles under each drop door, and not the solid upside down "Y". You live and learn. I have indicated such chains on the drawing.

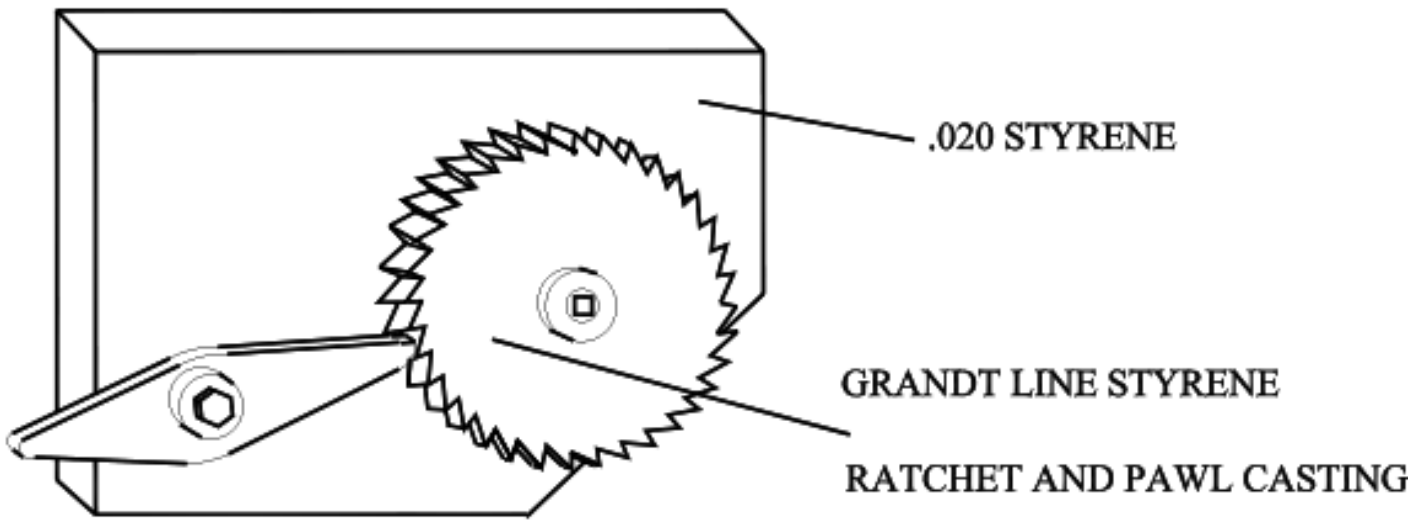
Door Control Mechanism

The doors on the prototype were dropped by releasing a pawl from the ratchet wheel on the brackets to each side of the car center which would allow the weight of the doors and load to push the doors open with a resultant loud bang and clang. A bar with probably a square hole in a wrench-like end would then be used to ratchet the doors back closed when the car was empty. The ratchets on the car sides connected to a shaft that wound up the chains, mentioned above, pulling the doors up into the closed position. A shaft would have run laterally across the car from the ratchet on one side of the car to the ratchet on the other side, with two such shafts on the car, one for two hoppers on each end of the car. There probably was a chain between a gear on each of these ratchet shafts that drove another gear on a shaft directly above the center of each pair of doors. The gears and chain were usually located between the two hoppers and directly below the centre sills. This was a fairly common, and I suspect high maintenance, early door operating arrangement. But what is not shown in any photo is the end bearing for the shaft above the doors. It may have terminated on the car inside and not have penetrated the car sides.

I did not model the chains and shafts, but if you are a real masochist, you could. If you build the car as unloaded, you might need one pair of the shafts inside the car.

A sketch in Figure 4 provides details of the ratchet and pawl assemblies on the trapezoidal brackets near the center of the car sides.

Figure 4 DOOR OPERATING MECHANISM



I like brake rigging. In O scale, it is easy to do and makes a car look complete. To me, a car without brake rigging looks a bit naked, unfinished, and hurried. One issue I had was how the brake cylinder would be fitted given the drop doors. I really had no idea. I assumed it would be a split system, i.e., a separate reservoir and cylinder as seen on many caboose and hopper cars. So that is what I did. Otherwise, the brake system is pretty much stock standard with two brake levers. My drawing is conjecture as there is nothing available to help us get this right.

Brake levers I make of some styrene strip. One trick I have used for years is making of clevises that go on the ends of brake rods and connect the rods to brake levers using Grandt Line styrene turnbuckles. I carefully cut one end from the turnbuckle. The brake lever is then inserted into the newly formed slot in the modified end of the turnbuckle. and the brake rod inserted in the hole in the unmodified end of the turnbuckle. I find this much easier than cleaning up lost wax cast brass clevises and drilling them out to clear the brake rod diameter. It is a lot cheaper, too.

There should be a brake rod running from the end of the brake cylinder to the brake wheel on the end of the car. I have no idea how this would have been routed on a car with the large floor hoppers, so I left that detail off my model.

Underfloor detail is included on the drawing in Figure 1.

Details

Coupler lift rods were formed from some 0.15 diameter brass wire. They need to be bent to clear the brake staff and the vertical end angles. I used small brass eye hook castings to attach the lift rods to the car ends.

The layout of the grab irons before the Master Car Builders established standards was up to the whim of car builders and purchasing railroads. The MCB finally had a good look at train crew safety needs and developed the standards so that men would know where the grabs and steps were to be on any freight car. This was a particular advantage when working at night. Accidents were very common with brakemen loosing limbs and their life when falling from moving cars. Poor appliances such as grab irons were a big cause of the carnage. This car was built before the standards came along so the grabs and ladders are not all that conventional by later standards, but are quite typical of the period. They would have been modified in time to comply with the safety standard. As I am in the 1930s, my car probably should have been updated by now, but that hasn't happened. Photos of the N&W cars taken in 1934 show revised grabs and steps.

Corner steps were in two places only as built and I made mine from brass strip.

Coupler pockets on my car are a compromise. To accommodate the swing of the Kadee and its draft gear box and still fit into the space between the vertical end angles, I only modeled the top portion of the prototype coupler housing.

I put "L" shaped corner brackets on the top angles at the four car corners. I am not sure the prototype had these. I wanted to tie the top angles together better and used them. They were very common on gons and hoppers. They were cut to approximately 18 x 18 scale inches from 0.020 styrene sheet and glued in place on all four corners. Some rivets were added on the top from rivet decals.

Tack boards were located on the right side of the car. These were wood on the prototype. I weathered some styrene strip with the side of my Zona saw and cut short pieces. The tack board would have been bolted to the car side so I pressed bolt heads into the four corners of the board to add this detail.

It appear to me the cars had a trust plate, probably on each side. It is the small rectangle just to the left of the tack board. These were cast metal plates that stated the car was owned by bank ABC, or maybe just had a trust number in raised letters. A common way to finance car purchases was by lease or with trust certificates. Banks bought the cars and the railroads paid for them over a period of time much as some of us buy automobiles. When the cars were paid, for they became the property of the railroad. In the meantime, the cars carried a trust plate to indicate they were owned by the bank. Trust plates were common in the early days of railroading, but were still around in the 1950s on older cars. I suspect that even when the car was paid for and the lease terminated, the plate was not removed promptly. Maybe when a series of cars was shopped the old

plates might be taken off. Precision Scale Company advertised these for eastern and western railroads. Eastern road plates are their part number PSH-4741. I tried to order them through Coronado Scale Models and found them to be no longer available. Adding these would have been a nice extra detail. A rectangular bit of styrene would make a good proxy.

At one time (in my old narrow gauge days), I always added air hoses with glad hands to car ends. They always broke off when the car was placed in use. Didn't matter if I used cheap styrene or expensive brass ones… they all broke. Often, if the air hose was not properly positioned, it would interfere with the operation of the coupler. And I was never happy that the Kadee coupler pins and air hoses made the car look like it had two air hoses. Since I use Kadee couplers still, I have quit adding styrene or brass air hoses to car ends as the Kadee pins look the part quite nicely.

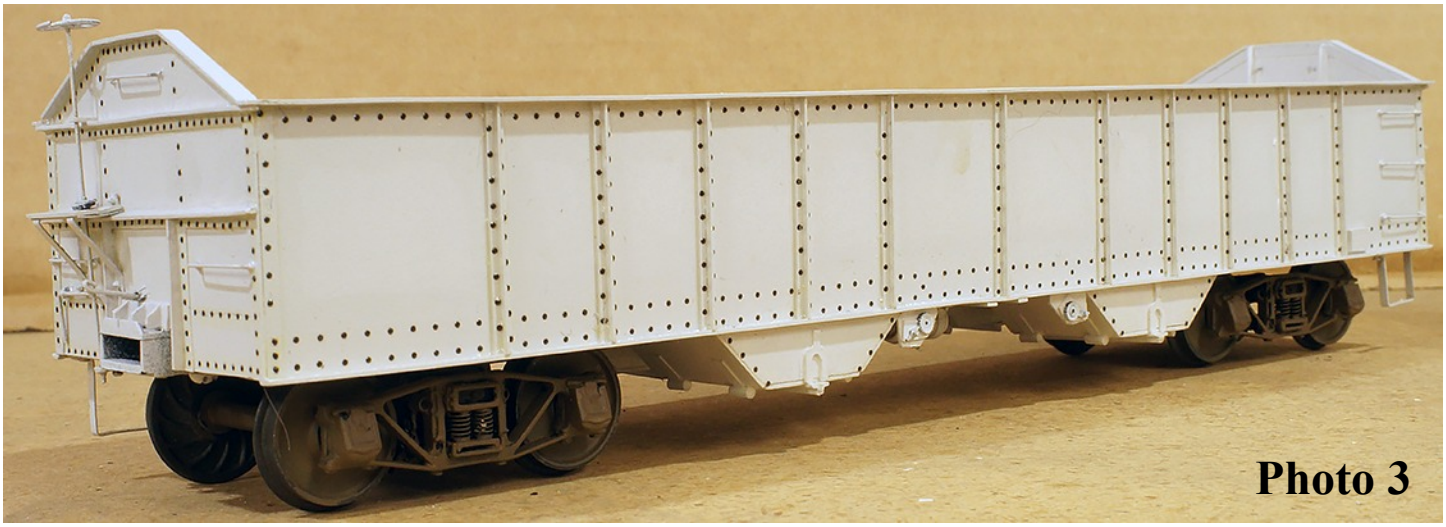
When I built my car, I had no idea what the brake platform and wheel looked like on the prototype since the photos I had were of the "A" end of the car. I modeled mine based on common practice as shown in the drawing. Then I found a very poor photo of one of the cars, in service, now lettered for the Montour Railroad, and with the "B" end showing. This confirmed that my guess was not too far off. I cut and bent two brass strips, 0.010 x 1/16 inch stock, to form the brake platform supports. These were each drilled with a #75 drill, two places in each bracket, glued to the car ends with ACC, then pinned using styrene nut-bolt-washer castings. The platform was made of 0.020 x .125 inch styrene strips. The platform is two boards wide. A hole was drilled for the brake shaft in one platform board before installation. A ratchet and pawl was skewered onto the brake staff and through the hole in the brake platform. A brake wheel was added to the top of the brake staff. The brake staff terminates in a bottom bracket made of some brass strip and also goes through a support made of styrene strip which anchors it to the top horizontal end angle.

There are about a zillion rivets on this car. In past years, I have pressed rivets into brass as well as styrene. But since Archer and Micro Mark have brought out their lines of decal rivets, I have seen the light, so to speak. First I primed the car with a gloss primer. Then the rivets were added. Strip after strip, after strip, after strip……. Took a few sips of red wine over a few nights to do it all, believe me. Thought I would go blind. But the effect is good. Some rivets would have been difficult or impossible to do as "pressed in" such as the side stakes. They were not all that easy with decals, but they were manageable. When the decal rivets were good and dry, the car was hit with a second coat of gloss to seal the decals. Actually some helpful fellow on the Yahoo traction group suggested this as a means to avoid pulling off rivets and it appear to work, particularly on cars that require masking to paint. So far so good, I have not had any peel off the car yet.

And I could, and probably should have, applied a row of rivets to the angles on the inside top of the sides and ends. But after putting all the rivets on the outside of the car I was riveted out and tired as the outside rivets, and the wine, had worn me down. Since the coal load does not come clear to the top of the sides and ends, this internal row of rivets would have been a nice added detail. But my car won't have it. One thing that did come to me when contemplating the missing row of rivets on the inside top angles was that when the coal load was ultimately installed in the car it might tear off some of the internal rivets and I would cry. I consoled myself with the thought that this worry was better left untested.

If you are planning to have an empty car, the floor would definitely benefit from a profusion of rivets as there would have been quite a few on the prototype no doubt. I have shown some floor rivets on the drawing just as conjecture.

Photo 3 is the car with rivets in place and ready for painting. And in this photo, I see the rim of the brake wheel is cracked. Unfortunately, close up photos have a way of identifying all the model's defects.



Finishing the Car

I am not certain the color of this car was black. A freight car red/brown was also common for gons and hoppers of the period as it was, I am told, the cheapest color to make. But I believe the prototype was black and so painted mine that color.

Decals are not available for this car in O scale. I did the artwork and had mine printed. There are some minor difference between mine and the prototype fonts. This occurred before I found more appropriate fonts on line. But I am happy with the results. I drew the artwork for the Pittsburgh & Moon Run cars as well just in case I get the urge later to have one of those. If anyone would like the artwork I used, it is available for the asking.

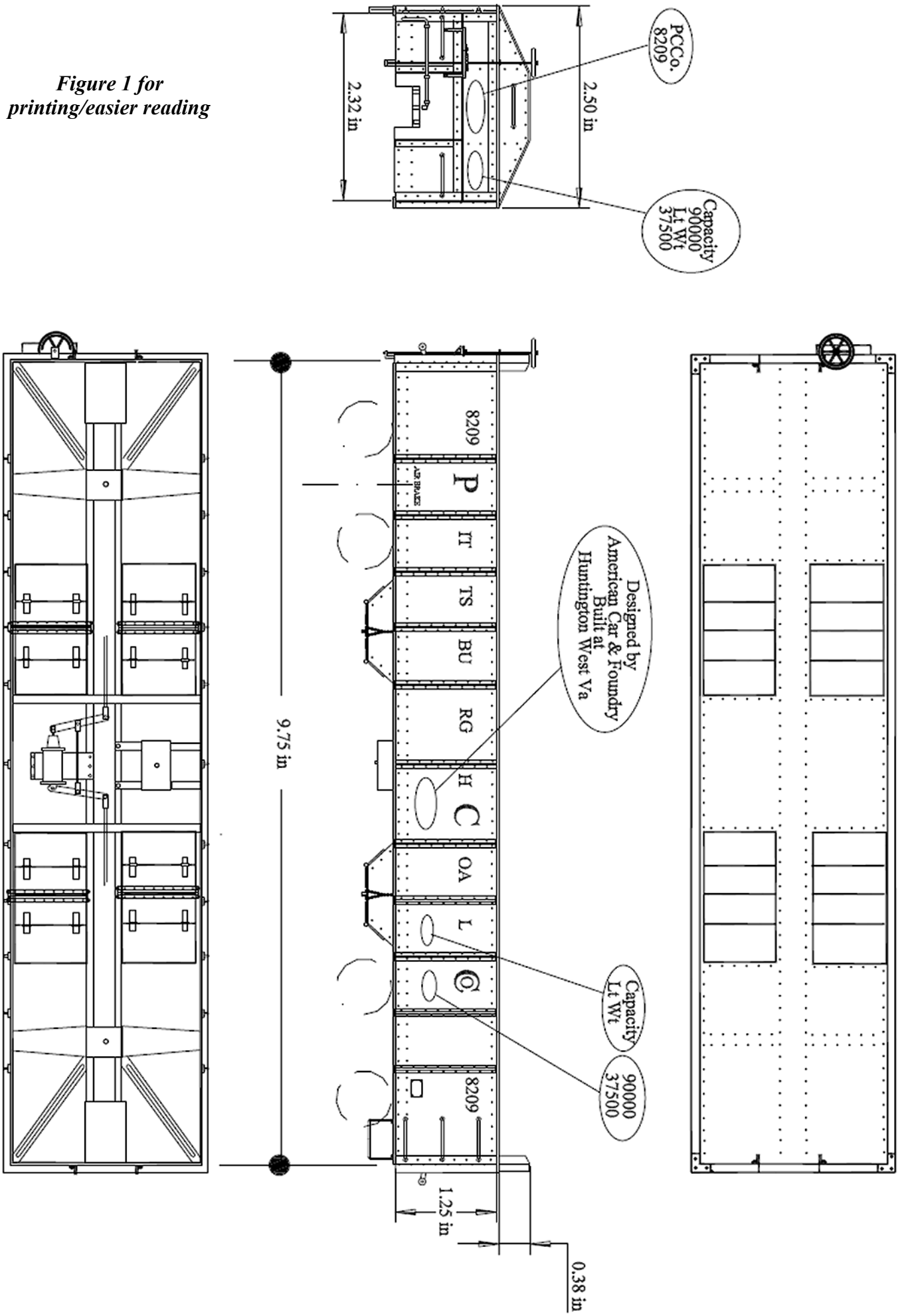
Trucks on this car were stock standard arch bars. I used the very nicely made ones from RY Models. RY is now out of stock on this item, but Rich tells me he will be bringing more in shortly. All of the trucks I have purchased from his line are very nicely made, good looking, and good running. They are all brass, have the brake beams and levers as per the prototype, and come painted.

If you are modeling 1900, these cars won't need much in the way of weathering. But since nothing takes as much of a beating as a poor old gon, and, since I model 1930, I thought a bit of weathering was appropriate. Not to mention, I really like dirty and weather beaten cars. I painted the wood on the on tack boards and brake platform grey to show effects of years of weather exposure.

This is quite a unique car and appropriate for any layout based on an eastern prototype as this car, with a load of coal, in the early days, could have been dispatched most anywhere east of the Mississippi River I suspect. Probably late in its career, it was a captive car between coal mine and cleaning plant or local customers. Hoppers with their larger cubic capacity took over most coal delivery beginning in the 1930 I would guess. But, that would not be a universal rule as I have seen Burlington gons used for coal traffic on the Belvier and Southern, a Missouri shortline, in 1960 photos.

Give this car some thought. It is straight forward and simple to build, it is unique, and there are no kits for it or brass models of it…..yet. And, hopefully there won't be. Nothing grates on me more than having just finished a nice scratch built model only to find some turkey has brought out a kit or imported a model of it. And, it happens all too often.

Figure 1 for printing/easier reading



THE BASIC BUILDABLE AND COMPLETE RAILROAD

By Pete Mottershead
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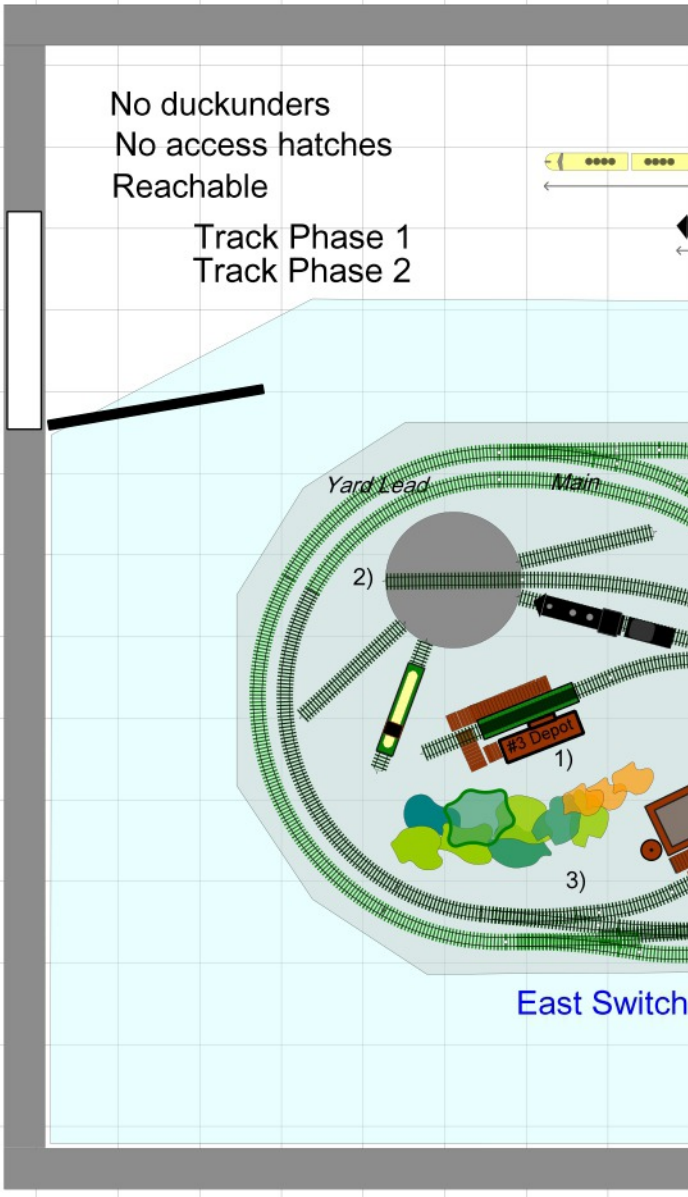
http://www.specialtytrackservices.com

Easily the most prototypical and indicative name for a railroad. Well, maybe not. But it does suggest something important to model railroading especially in Two Rail O Scale. It's a lot of fun to design a 30' by 15' model railroad with hills and view blocks and yards – maybe two – a junction, and a bunch of line side industries. Big sweeping easemented curves with big steam engines or streamlined diesels hauling splendid looking 80 and 85' coaches' diners and Pullmans. You know what I mean. But the fact of the matter is, most of

The Basically Buildable and Complete RailRoad
I Just Love to Tinker

The BB & C Route

32" minimum main line radius
2.5% minimum grade
Track centers 16' at min. radius (curves)
13' on tangent main and 12' in yards

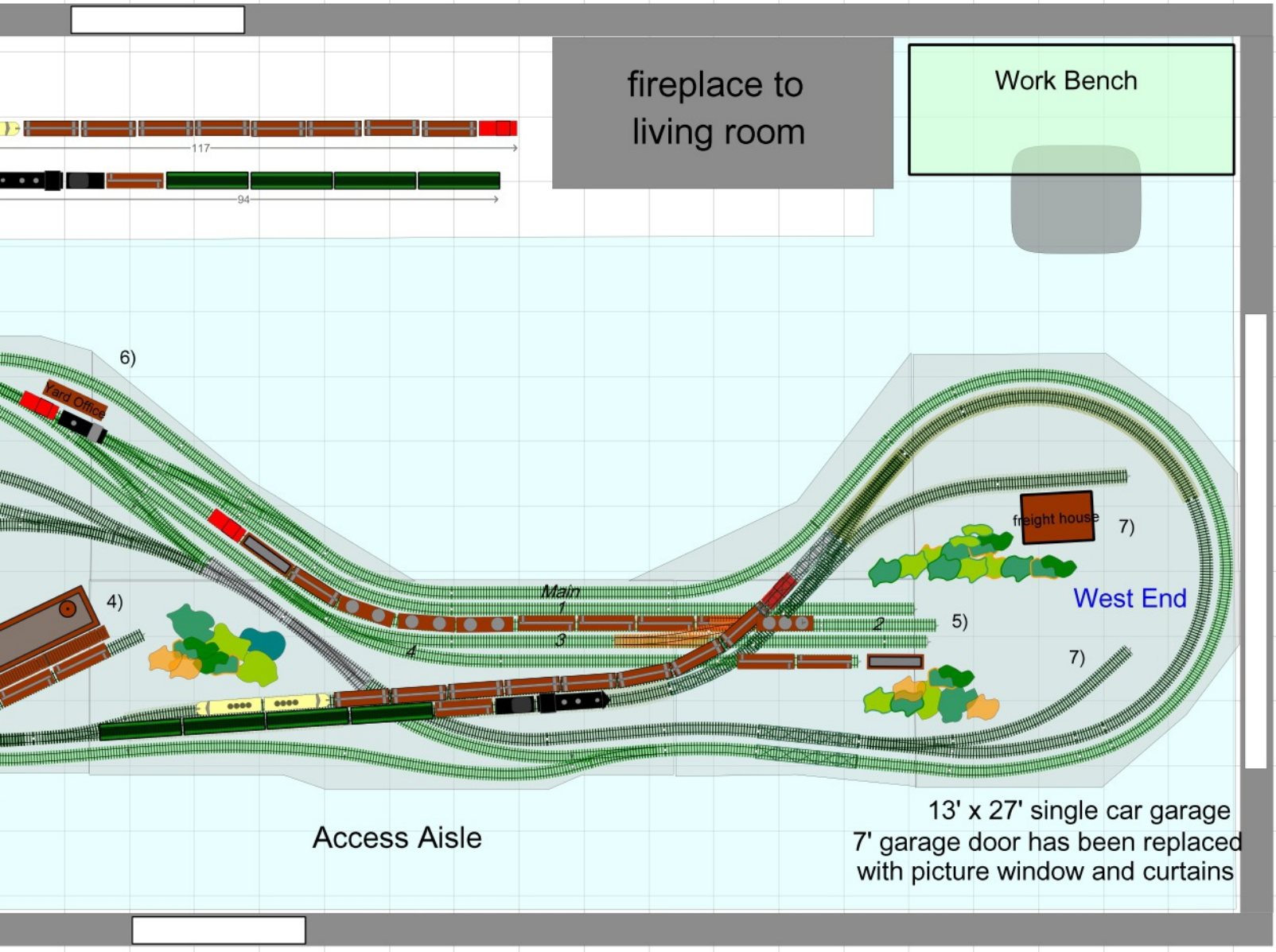


More details on Notes in the text.

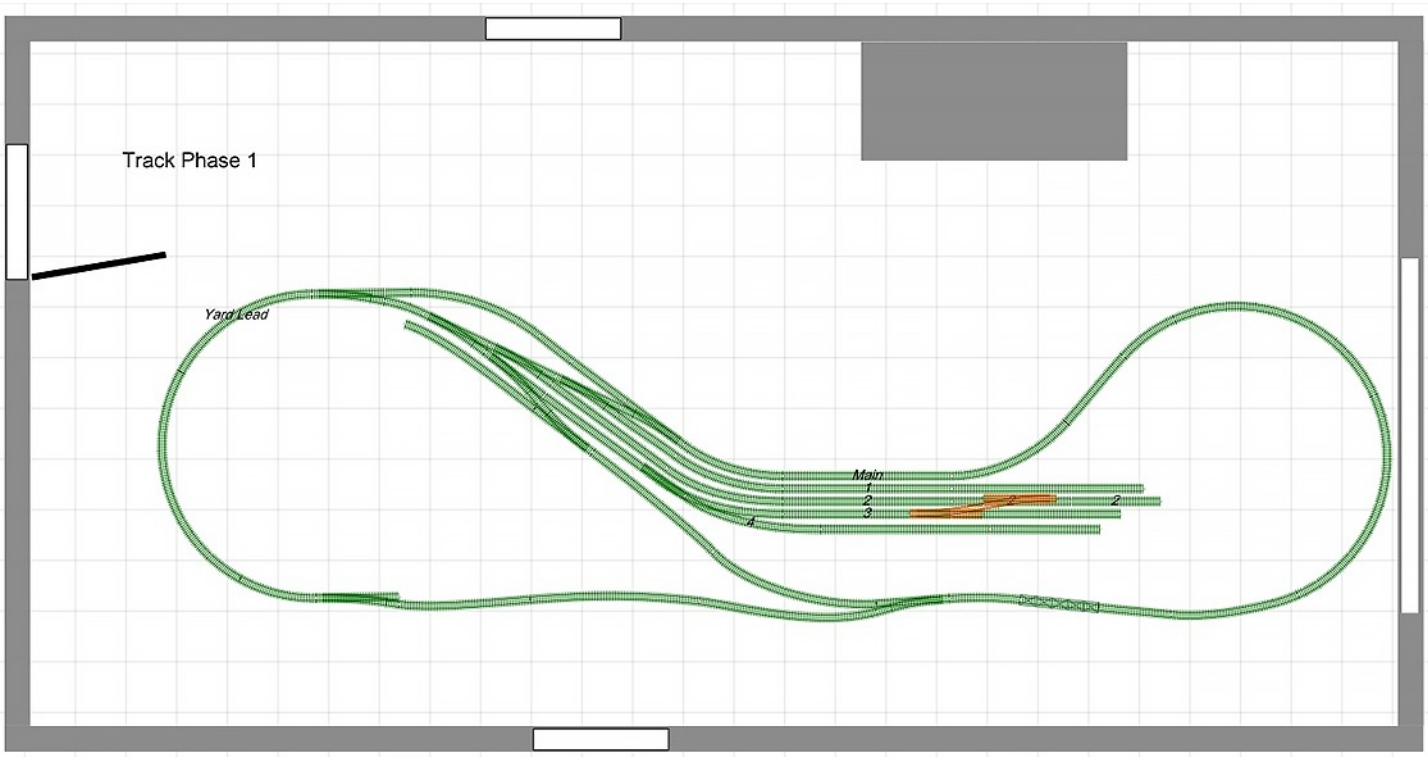
1) 60' Combine parked between station for passenger pickup and high level wood platform for mail and small LCL.
2) 60' turntable. No coal tower, water tank ash pit, sand tower, etc. Just flat out not enough room to look realistic
3) On both ends the inside track is the main. The train on the high line is an express that did not stop in our little burg. He came though town on the main; then crossed over at East Switch to complete the climb Eastbound
4) Frantik Frankfurters meat plant. Old brick building yellow in color with faded white and red trim. Water tank on roof, 50' smoke stack on west end of structure.
5) You CAN add considerable length to the yard tracks. Because of the over pass the extensions won't look out of proportion, and to park (spot) and retrieve cars from the bumper end, you'll just have to do more switching. Shucks! (The lead end has room for that).
6) As mentioned in the text, the layout is a platform or foundation. For scenery and structure people, the yard office is a great place to build an attention getting building right up front.
7) Spurs for on line switching. Local peddler picks up and drops off cars to and from yard. Because of walk around capability, operator can have fun switching literally the entire layout.

us really are lone wolves and pretty much have to go it alone. Coming up with a plan that allows good operation, movement and flexibility is nice. But designing one that can do all of the above AND be completed, by a single soul, that's really something else again.

So why does your layout need to be completed? It doesn't. But for a lot of folks, the layout in and of itself is not the goal. It's sort of like the stage; the classic Frank Ellison description that has been used so often in MR press. As you can see from reading the pages of ***The O Scale Resource***, there is a strong emphasis on building. Building cars, engines, structures, scenery, just about anything that falls into the realm of craftsmanship. (How good you are at it doesn't matter!) So the layout design, specifically I am talking about the track plan, really is just the platform for whatever comes next. But to begin the trek towards the end result, and get that platform, the owner has to have confidence his design is going to take him where he wants to go. Just like the foundation of a house, it's awfully hard to add another room after the fact. Hard as heck to create an open beam ceiling with 8' high ceiling joist in the way.



The BB&C is intended to allow the builder to progress through the construction phases, taking time to do something "railroady" along the way. Since there are no access hatches and the plan is 80% walk around, bench work can go pretty quickly. The track work begins with about ½ of the overall plan. At that point we will show the creator how to begin actually running trains and not just in a circle.



So let's fast forward to the day when our hero has the first phase of his track plan in place, electrical is working and his RTR equipment has been RTR'd. Now it's time to try out that pair of new F7's with the 8 reefer consist. The track plan has to cooperate. One thing I truly believe is do NOT design yourself into a corner. I guarantee you if that baby is gonna squeal, kick, or heavens above, derail, it will be where it's least accessible. When that happens, you think to yourself, I would have given up a couple inches in minimum mainline radius just to get into that corner. Also, it's nice to arrange as many run-arounds as you can just to allow that flexibility I keep talking about. In this case, you may have to walk around a bit, but no need for a cantilevered ladder or a ceiling mounted gantry crane. Since, in the end, for most of us, there really is only one operator guaranteed to always show up; and since we really cannot truly operate more than one train at a time, we need places to park other trains while we move the one under our control around the property.

The Big Idea behind the BB&C is a track plan that lets the builder get started and progress to a point where he can get on with ***Modeling***. At the end we will talk about enough storage space to put those extra cars that really did not fit the era, locale, etc. BUT did fit what he wanted to build.

I'm going to take a moment to talk about that. There is a certain 'purity' going on in the hobby that I think scares some of the uninitiated and keeps them from getting their feet wet. HO and N seem to be heavy in this aspect. One thing I love about 2 rail O scale is a little bit more independent attitude. It's YOUR layout. Your effort, your time and your money. If you are from the Midwest and want to model the MILW or IC or SOO, no problem. If you have always been in love with the B&O 0-4-0 Dockside (and it just happens to fit your budget) get one! Here's the scoop: The B&O only had 5, 6, or 7 of those things and they all ran on the East Coast docks. As long as you know that, you can quickly act knowledgeable enough to be comfortable and enjoy what you have. You see a MILW Bi-Polar and, boy oh boy, does that look cool. Or a Pennsy GG1. (Some New Haven electrics were painted in Chinese Vermillion. Who could possibly resist that!) Go ahead and make the deal. Do your research and enjoy your model. This hobby is about having fun, NOT conforming to someone

else's standard. And while I am on my soapbox, I have noticed a significant difference between 2 rail O and other scales: When your smaller steam engines are 15 to 20" long, your 40' box cars are 10" long and a 60' commuter coach is 15" long, a typical consist can easily be 10' plus. If you are lucky enough to have 7' x 25' available for your layout, you STILL will have trouble representing any major mainline class 1 railroad. I mean we are just trying to turn around here folks. You can think of this as a highly restrictive limitation OR you can think of it as a great deal more freedom. Notice we say nothing about a specific prototype. Pick one, or not. Believe me, by the time you make the commitment, build the bench work and get the phase 1 track in along with wiring, you will naturally start thinking in terms of locale, era, and equipment.

In the December 1959 issue of Model Trains, Gil Reid built a nicely designed small layout with nothing more than a GP7 or 9 and a 0-4-0T. (I think he was working on a small steamer too.) The Geep did all the work, but he said "when she was laid up, you should've seen that 0-4-0 pulling the RPO run". An industrial switcher hauling a passenger train? Gil knew what he was doing and he was having fun. Faithfully adhering to a specific prototype in a specific era and location may not always be the most fun way to go. By the by, I am not here to promote high rail. We are talking a craft, not a toy.

The reason I have hit this so hard to is to encourage folks interested in the hobby to get going and build something. A box car. A tower. A small factory. A large factory. Lay some track, hook up a controller and feel your face light up when she moves on out. It really is cool.

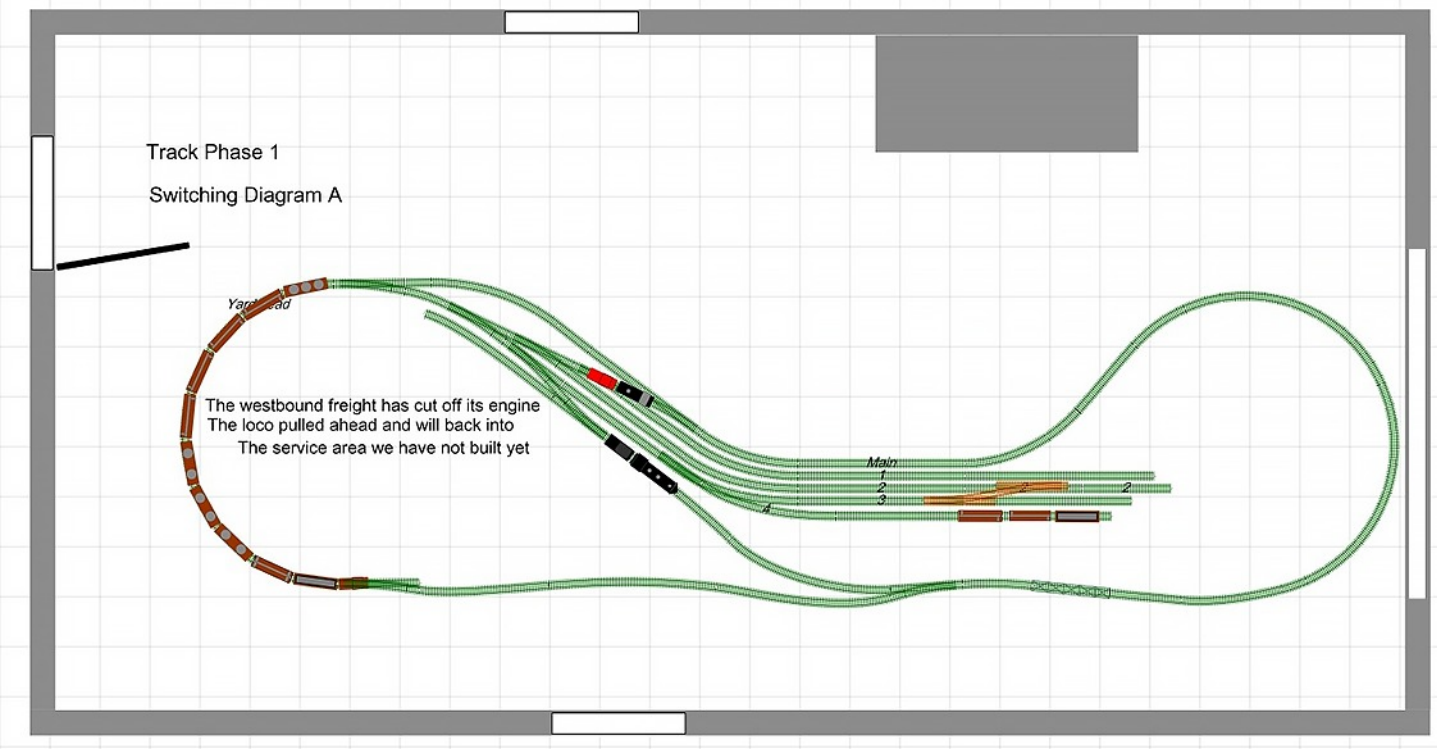
The BB&C has some facets that do run against the grain of conventional wisdom, and I kinda want to list them and take them on right now. First of all minimum mainline radius: 32 and 36". Not exactly the 72" that was vital in the first of this series back in ***The O Scale Resource July/August 2017 issue.*** But here is something to keep in mind: I absolutely, positively guarantee you will have just as much fun with that 2-8-0 consolidation hauling a 6 car peddler as you will watching your 4-6-4 Hudson and its shiny NYC passenger consist. The 32" is equal to an 18" radius in HO but, its 32"! 64" diameter – that's 5' 4" across as opposed to 3' across. That's a big difference. I've been selling this plan as a step down; a smaller version of what we all like to see, but at about 7' by 25', this is no shrimp. It fits a one car garage, and as planned, gives you room to move around.

Probably a good idea to limit your passenger roster to 60' coaches, baggage, combines, etc. With a light Pacific doing the honors, a 40' express car, a baggage, a combine and two coaches, you have a real nice passenger consist that measures out at about 7 feet 10 inches. You will like how you look, I guarantee it. (*Sorry about that.)* Something I want to point out right now: That passenger train is a long way from the Empire Builder or the 400 or the Merchants Limited, but it represents what the overwhelming majority of riders experienced during the age of steam. Not backwoods, just common. From New Orleans, up the entire state of Louisiana or New York to Boston or Cleveland to Cincinnati, LA to San Diego or Dallas to Houston, this was the staple. If you have a strong feeling toward some railroad or part of the country, check out its history. You will have to weed your way through the fancy name trains, but when you get to the everyday, regularly scheduled 4:15 to Indianapolis, this is what it will look like. Very cool.

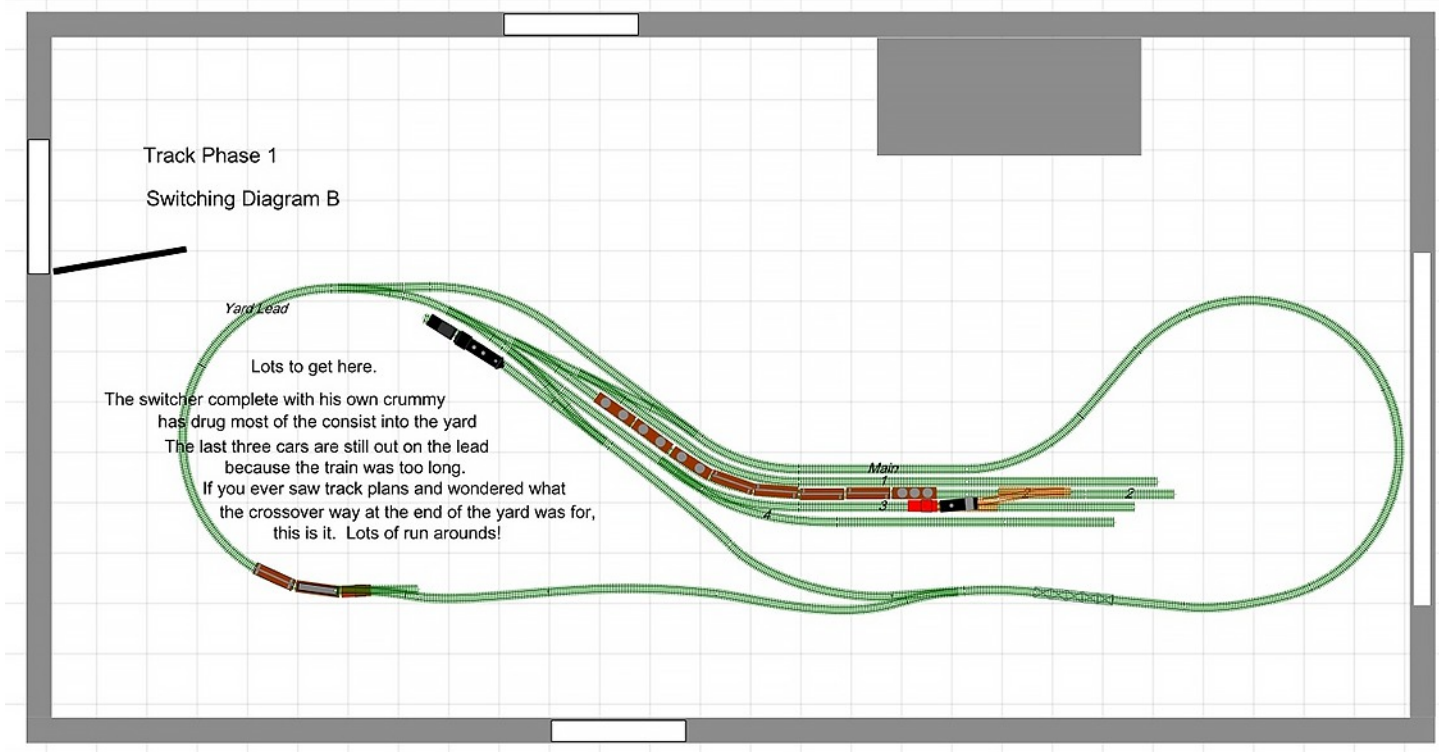
Learn to switch.

This is a biggie when it comes to scaring off new guys. It's not that big a deal folks. It might be at Bailey Yard in North Platte or Sunshine in New York, or the Clearing yard in Chicago, but frankly, you'll be doing well to have 5 tracks. Figures 3A through 3E show a simple inbound freight and how a yard engine might deal with the cars. The effort requires two run arounds. Sort of like what you need to know to keep from causing yourself problems. Once you digest this process, it will be fun to look at other published plans to see how they might handle inbound and outbound switching from either direction.

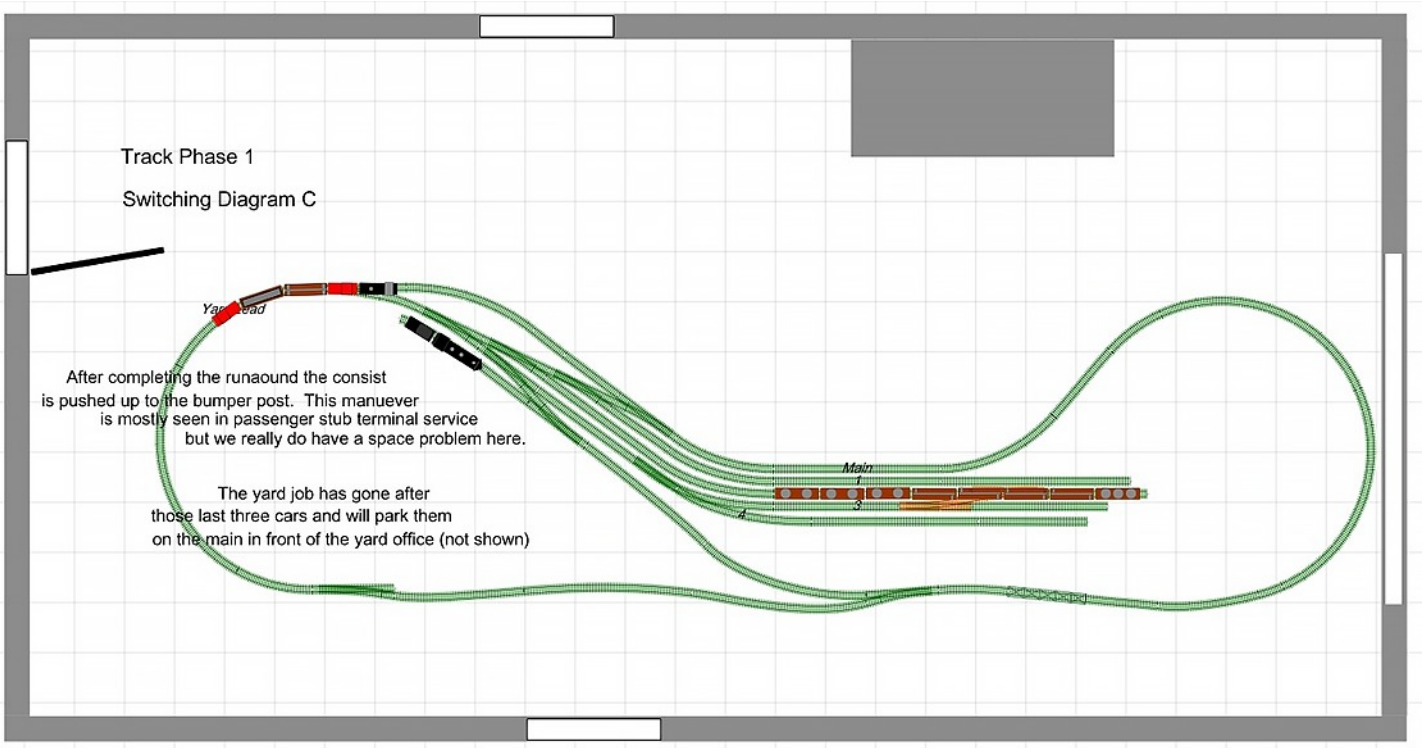
The text on the following pages gives you a general idea of what is happening. The diagrams, read in order, give a little bit more detail while showing exactly what is being done.



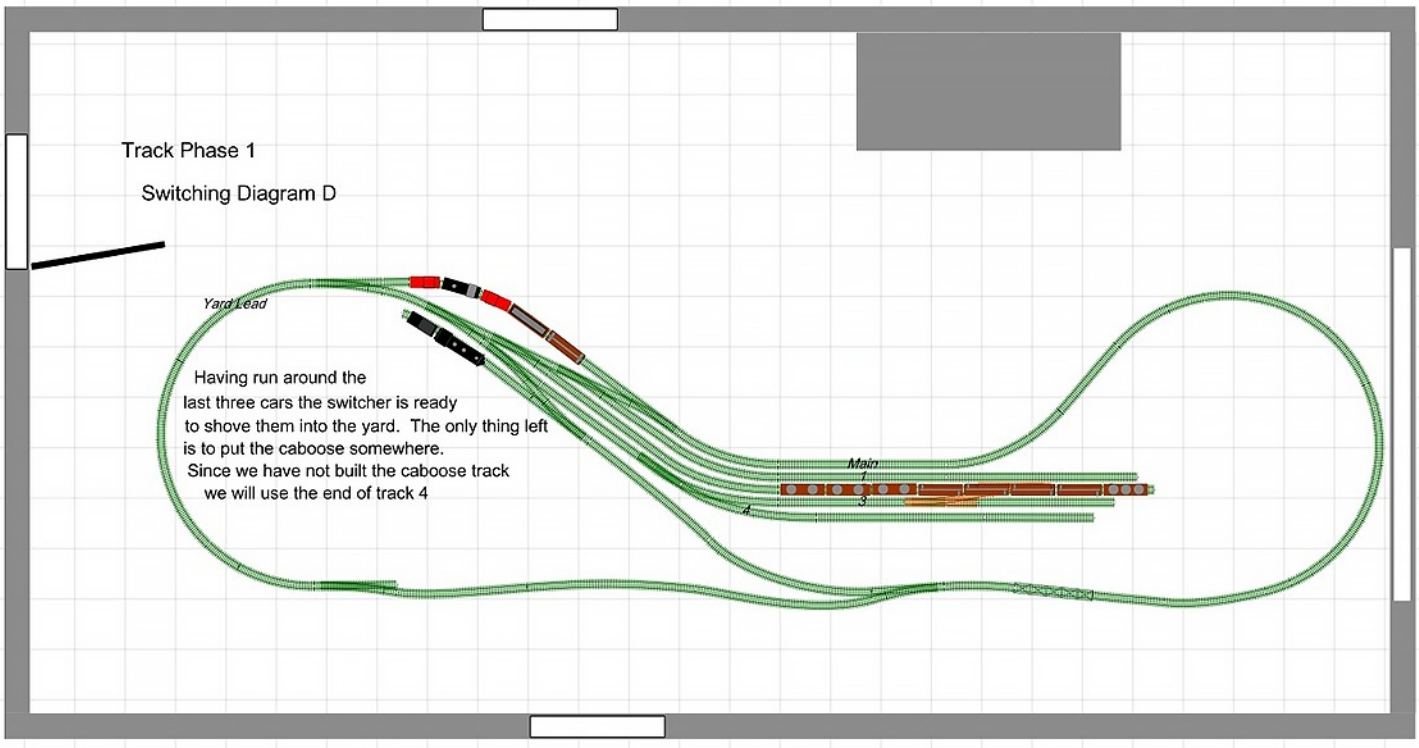
Train arrives from the West – engine cuts off goes to house.



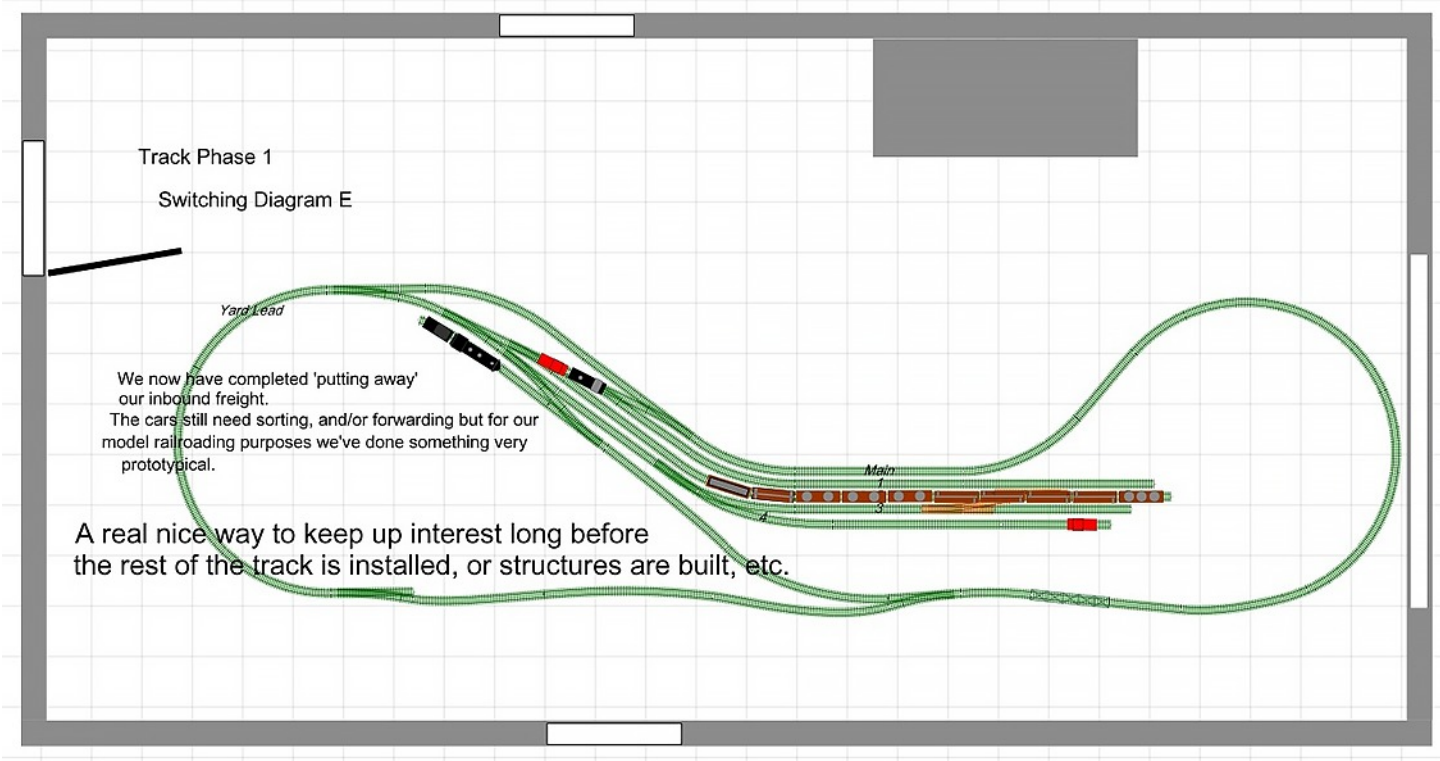
Switcher pulls train to run around track so he can get behind it.



Switcher pushes consist to bumper post.



Our example has a train longer than the yard tracks. This is what we do.



Switcher removes caboose places it on caboose track.

Switching Basics and the Mainline Run.

First of all: Which way is West? It seems natural that all maps – and therefore track plans – the observer faces north. (I am sure there will be a movement against this sort of prejudice someday but so far we are holding to tradition). Facing north, of course west is left. Now is that for the yard or the main or what? In this case, I am declaring it's the yard right in front of the operator which is front and center on the layout itself. So if a train leaves the yard headed east – to the right – makes the turnback curve and starts up the grade and crosses over the yard; he is still going east.

We have two run around tracks in the yard area. If you ever get a chance to look at a drawing of a real RR yard, you will see lots of run arounds. The railroads want the switch crews to get done and gone just as much as the crews do, so extra turnouts and crossovers is no big deal. In fact, I think it's a bigger deal to us modelers than to the prototype.

So where and how to the road engines couple up or unhook from their trains? Some on the mainline itself, others have arrival and departure tracks specifically for these purposes. In our case, that yard lead is the key to getting in and out. Check out the 10 cars and caboose that sits on yard track 2. Its train was switched to the yard lead at East Switch. The head end power cut loose at the switch just east of the yard office and headed for the service area. The switcher sitting at the yard office ran forward enough to back down to the main switch then forward once again all the way out to East Switch, coupled up to the caboose and pushed the whole thing into track two. Then pulled forward awaiting instructions.

At least have a single track for engine service area. No big deal, we want to go railroading and we're gonna by gosh.

The yard is a great place to start building. You can have fun right here for a very long time without ever completing a 'loop'.

Comments on the Notes: (*Refer to the main drawing at the beginning of the article*).

This plan is intended for a one man operation – maybe with a good friend helping. The sharp main line curves allow the thing to exist in the first place and even get some decent operation. But the big idea here is the ability to pay a reasonable amount of attention to each and every part of the track plan.

1) The depot area is a throwback to quieter times. Instead of being on-line it's located on a side track. A combine spotted in front allows passengers to pick a seat and just sit while the baggage and mail is loaded and unloaded. Lots of room for detail such as benches, scales, milk cans, parcels, freight dollies, baggage wagon, vending machines, coke cans and cases, a critter or two, power pole w/meter, phone pole, small shrubbery, and of course, people.

2) Turntable, but no facilities. This is a space issue. We cannot depict everything. My personal experience is to somehow bite the bullet and not over crowd. Takes a lot of will power. Just don't glue anything down. (So I am telling you to build but not to build? Hmmmmm. I'll get back to you on that one!) Don't worry, there is plenty here to do.

3) The yard lead itself is a run around. It also doubles as a passing siding. You will have to stop switching operations while a westbound freight waits for an eastbound passenger. The NYC never did that in downstate New York, but we can and rightly so.

4) There is something tricky going on at East switch the builder needs to know about. Both the main and the yard lead climb a 2% grade up to the switch and the factory. From there the main continues on up until it clears the yard tracks below. The track that was the lead, and is now a secondary main, begins to descend and join the lower level track headed for West End.

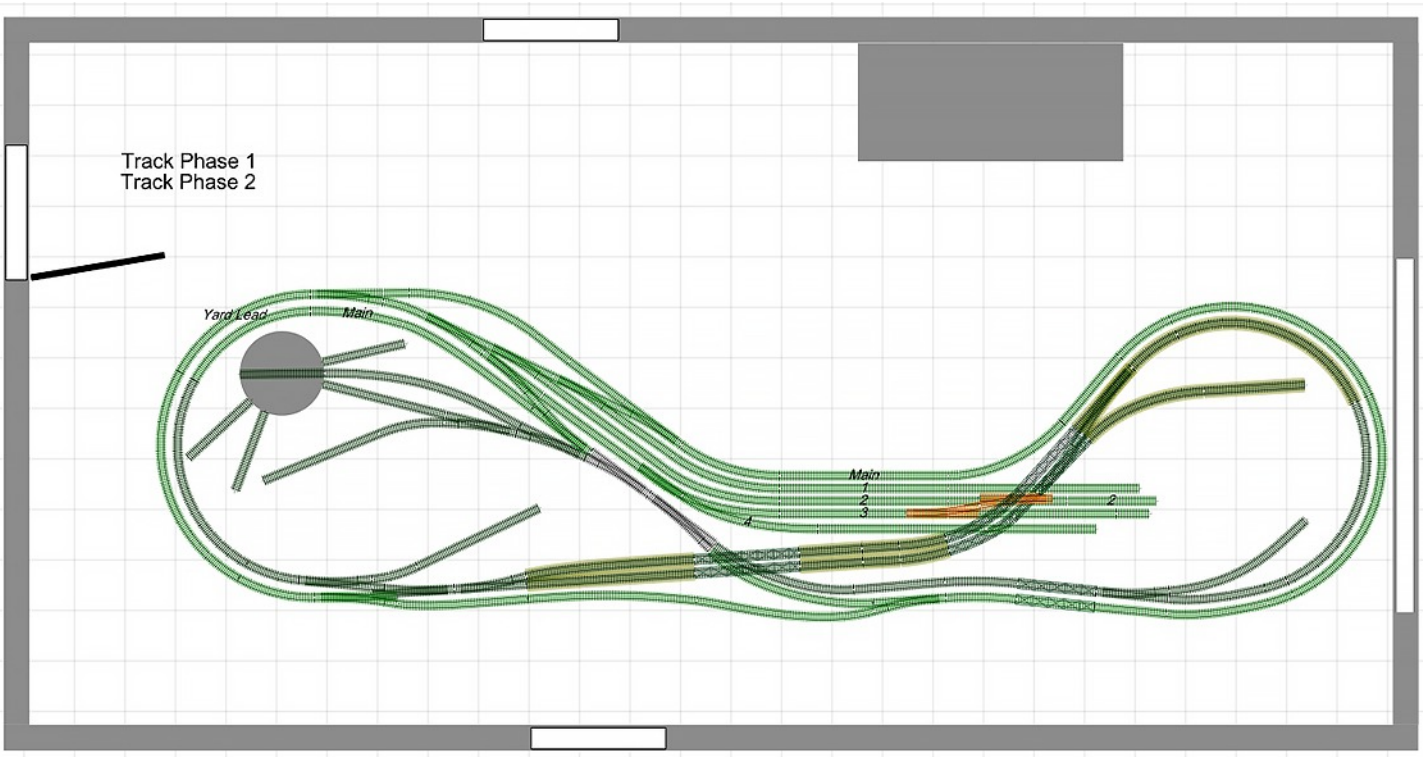
5) Storage is always an issue; and there is never enough. The yard tracks can be pushed all the way to the West End loop tracks. Here we should think about perhaps a tree lined view block adjacent to the freight house. Those tracks can be accessed from the backside and hidden from the front to avoid a disproportionate yard capacity to main line run.

6) The yard office. This is a great place to spend some time putting up a highly detailed structure. Single story, so the observer can appreciate the enormity of the locomotive sitting right next to it. The yard engine spends a lot of time here because this is not the busiest or largest location on the system.

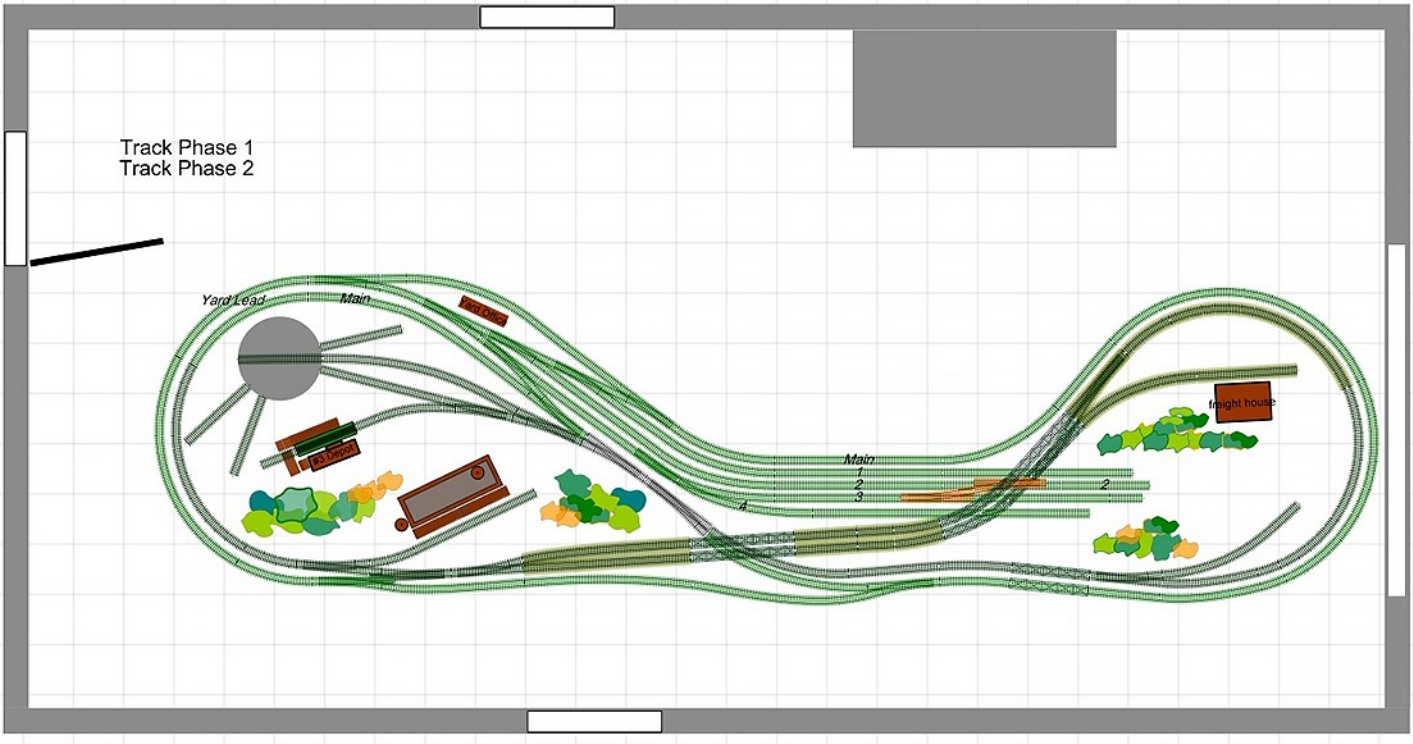
OK, another soap box, brace yourself: *One thing I dearly love about model railroading is, as a hobby, it does a great job of melding the arts and sciences. Most of us are science types, that is, engineering. Figuring out why the pilot wheels seem to hit the pilot as the loco eases into super elevation. Programming DCC or wiring a control panel. But there most definitely is an art – or perception, anything but hard and fast logic – to all this. Trees, worn down buildings, rivers, creeks, elevations, etc. I think this is the part that makes the layout believable to visitors. I also think it's what makes the layout visually pleasing to the builder. Perspectives are an art form. Knowing when enough is enough and one more thing would be too much. If this comes naturally to someone, I doubt they will be interested in taking two days to figure out how to quarter the drivers on an 8 coupled engine. So, for us science inclined folks, art is kind of learned. But there is no denying the combination of these two entities is what makes the great model railroads. Next time you are out for a drive, check out the landscape. Aren't the trees absolutely believable? (Ahem.) Can you tell the difference between a man made and naturally eroded embankment? Just exactly what color IS that worn out line pole? I am certain there is a subconscious mind's eye that tells the viewer if something is right or not, but they can't verbalize it. Picture an old boxcar sitting on a siding in the shadows of large trees along the right of way. A ¾ angle taken from rail height. Nothing else. Those trees can add so much atmosphere to the scene, you'll wind up pulling your entire RR away from the wall just to make room. (Probably time to start stepping off the soapbox). Model*

railroading, and in particular 2 rail O scale where we literally have to scratch build everything, is a hobby that can keep you enchanted for a lifetime. There – soapbox over!

Everything we have done up until now has been to highlight how much you can do in early stages. But, after all, the name of the railroad is the 'Basically Buildable and **Complete** RR'. Here's a look at what finishing up would entail.



Some scenery suggestions:



All we are doing here is throwing in a few trees along with the overpass and the meat plant to force the visitor to stroll around the grounds.

Storage.

Of course you have to pick up the cars a lot. But it would be nice if you could avoid that at least some of the time. We really are out of room on the main level. In the Model Railroad press you will see discussions about 'visible staging'. I have included this concept, as storage, in past plans such as the front and back yard in the Country Crossing in the last issue of ***The O Scale Resource***. The idea is to have trains ready to go that can move onto the main display without 1:1 scale intervention.

Hidden or staging or storage track, whatever you call it, has always been tricky unless you sacrifice a fair amount of space or bumps on the head. The ugly fact is, on this plan, on-line storage is really difficult. The smaller scales can get down a ramp in shorter distance than O scale, but for us: to get an absolute minimum of 7" clearance – which really is an absolute minimum, we need 23' at 3%, 29' @ 2% and 26.5' at 2.2%. Yikes, that's almost the entire length of the layout. This is going to take some real thought. In fact, it's a show stopper. *(Another note: I have a beautiful MILW 4-6-4 F6 Baltic with 6 enormous driving wheels. This guy struggles with a short heavy consist on a 2.3% grade*). For most of us, I think the only way to gain practical on-line storage is against the wall. Even this is not completely acceptable. The only sensible location is the ground level outer curve in front of the picture window. This means the main runs through the diverging route of a sharp turnout. **(X2)** Since this plan is designed to fit a "real" location and that location is fairly common – a one car garage – we can show how to gain some storage and keep things physically comfortable.

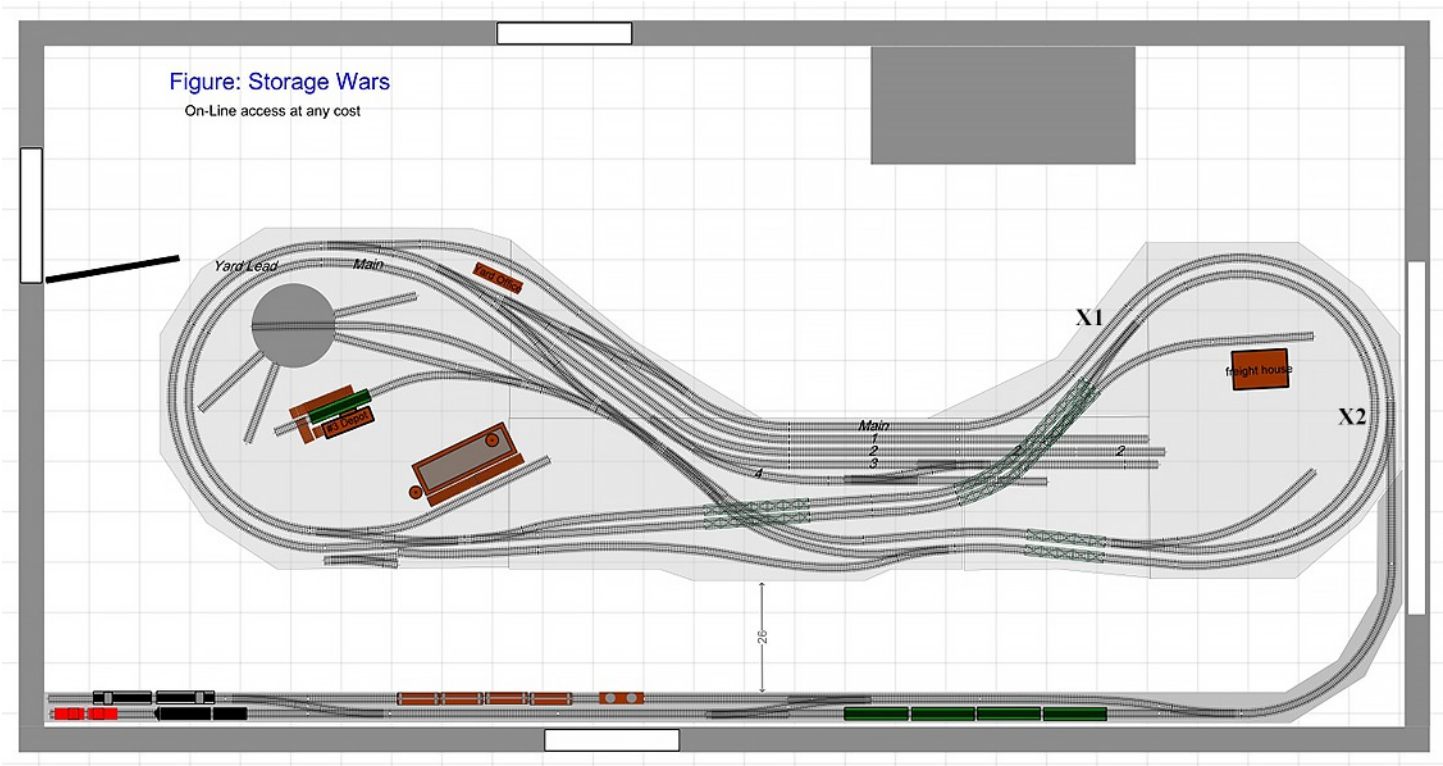


Figure **Storage Wars** above shows the entire layout pulled away from the downside wall. Not a great solution, but it's the best I can come up with. There is one more option: instead of putting the turnout at **(X1),** place it at **(X2)**. This means shoving everything towards the back yard about 6" and making it obvious what we are doing, but, maybe….!

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!

A final comment: Back to my friends at ***The O Scale Resource***. The magazine has begun a project they call mentoring. Heading up this effort is a fellow by the name of Jim Kellow. The idea is to arrange to help folks get into modeling, and somehow remove the reluctance so many people seem to have. Prototype questions do indeed fall into this category. The plan you have seen here has an intended purpose very much in line with this idea. Some of us have moved just often enough that we never really build any models. We just do house modifications, bench work, track, electrical, then call the house movers. These smaller plans with less of the grander elements have a lot to offer because two rail O scale model railroading has a lot to offer. Give it some thought.

Pete Mottershead
http://www.specialtytrackservices.com

A Load of Scrap for Your Railroad

By Charles Goodrich, MMR

Railroads generate a lot of scrap though replacement of worn out wheels, cracked bolsters and side frames, brake shoes and so on. Scrap is a consistent load for railroads, so it is only natural to use this scrap to generate more movements during our operating sessions.

I have been replacing plastic wheels on my rolling stock with InterMountain metal wheel sets for several years. It seemed wasteful to throw away the old wheel sets so I have been saving them less the metal axles. As a convenient place to hold them, I was throwing them into a spare gondola for safe keeping. They did not look realistic in their native plastic state, but they did look promising.

To improve their appearance, I decided to weather them as they would appear if they had been in a railroad scrap pile for a while.

I found a piece of poster board and placed a few rows of double sided transfer tape on the poster board, sticking the wheels, axles and other scrap parts on the tape. I then spray painted the parts with a rust color. After the paint had dried, I turned the parts over and painted the other side. I then gave the upper side a wash of India ink and alcohol. After this had dried, I remover the parts from the tape and applied the India ink and alcohol wash to the back side of the parts.

The components were mounted on a piece of illustration board (cardboard) with transfer tape for painting.

To keep the color of the load from looking too consistent, I applied Bragdon weathering power to some of the parts on top of the load.

The pictures show the results. It makes a very presentable load and adds another operation to your operating session as the scrap is carried from the railroad maintenance area to the scrap yard.

Above: Surplus parts from various projects were stored in a gondola until time was available for weathering. Below: A load of scrap bound for the scrap yard from the railroad maintenance facility. Wheels, axles, side frames, couplers, etc. that were surplus were weathered and loaded in the gondola for shipment.

Oddity

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

By Daniel Dawdy

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

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

Here is a cute little accessory that is not modeled too often. If ya got to go, ya got to go!
Photo taken in Eola, IL 1991

Scene Around the Layout

My name is Colleen, and I am Bob Cunningham's daughter. I sent the pictures of the Baldwin Westinghouse Electric on his behalf. My dad has been building models his whole life. He started as a kid, at 16 he was building models for a local hobby shop, and he hasn't stopped. He just turned 80 years young. He has an amazing collection of O scale models he built from kits and some from scratch. He has a layout with a train station, park, downtown, etc, He also built 2 live steam engines 3/4" scale. He was a machinist by trade, and his attention to detail is incredible. He truly is a master of his craft, not to mention a extraordinary man.

I've included some pictures of a Pennsylvania B6sb steam engine that my dad scratch built, an NYC S2 electric also scratch built, a few pictures from his train layout, and one of his live steam locomotives.

Above: Bob's scratch built Baldwin -Westinghouse Electric before painting.

Next page top: Finished model. Beautiful job indeed!

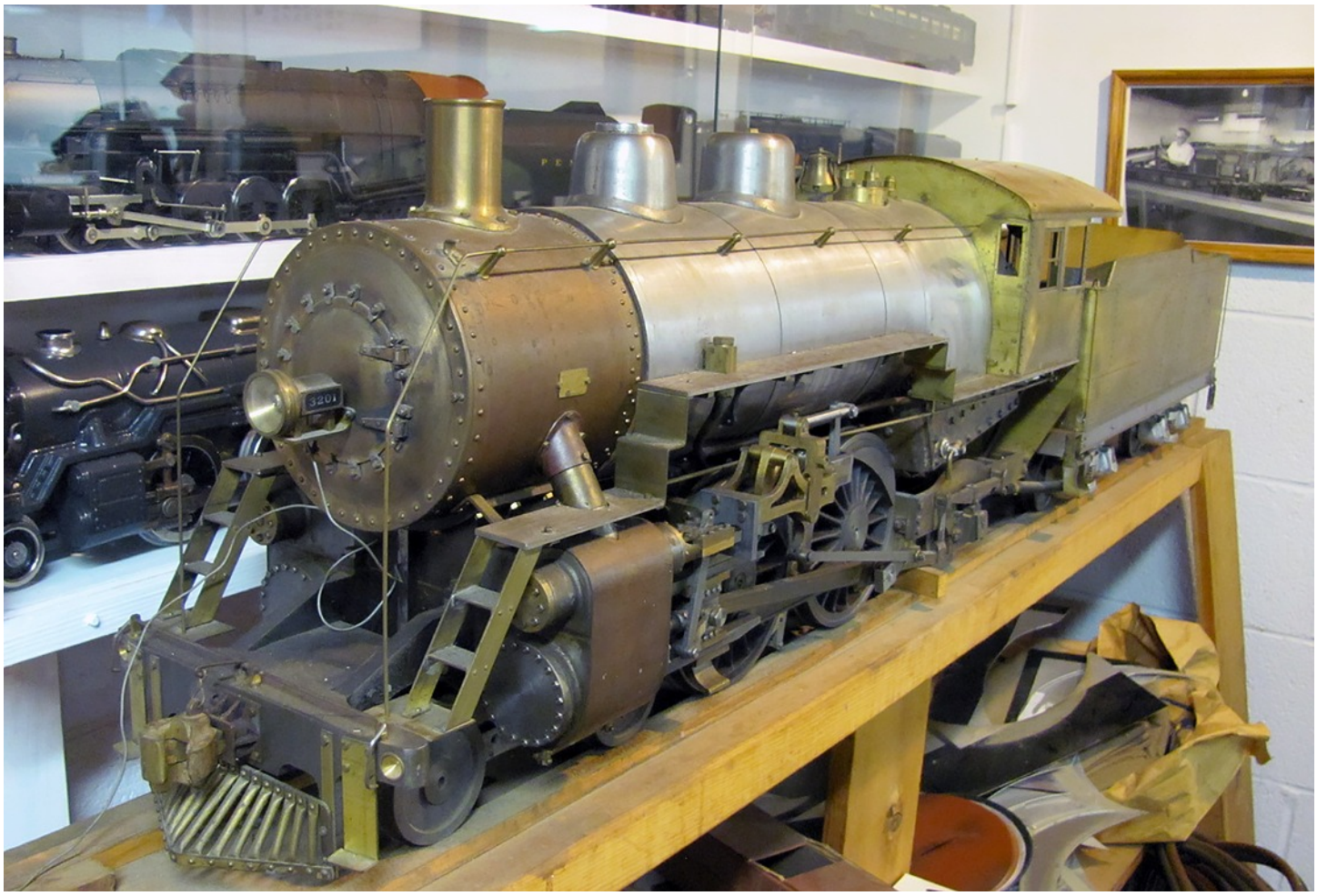
Next page bottom: Pennsylvania B6sb steam engine that my dad, Bob Cunningham, scratch built.


101
101
101


HENRY Rexall DRUG
ACE HARDWARE
NEW HAVEN
NH
36609

Above: NYC S2 electric also scratch built by Bob.

Below: A picture of part of Bob's layout.



Although not O Scale, I really like this. It's a ¾ scale live steam locomotive that Bob built.

Another shot on Bob's layout

We are proud to feature reader's work. With your help, we will continue to make this a regular feature. So get those cameras and cell phones out and start shooting!
High quality JPG or TIF files are only.
Email to daniel@modelrailroadresource.com with a description of your pictures.

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

From Dale Olson: I have spent the past 8 years modeling in On30. A recent pending move into a condo prompted me to dismantle my On30 layout. As luck would have it, as soon as the last rail was lifted, the condo deal fell through. This left me with the skeleton of a layout and the opportunity to start anew.

After agonizing for weeks about what I wanted in a new layout, my modeling buddy suggested that perhaps what was needed was to sit down at the workbench and build something. Checking in my cupboard revealed several unbuilt "O" scale kits. One kit in particular spoke to me - it was an old US Hobbies 50' plug door boxcar kit which had been assembled before my On30 days and needed only a few details and painting to finish. I was hesitant to use the 40 year old Champ decals, but the only difference I found between these "antique" decals and modern decals was thickness of the decal film and soak time required to get the decal film to release from the backing paper.

Working on this old kit has again sparked my interest in "O" scale, and has me dreaming about a P:48 industrial layout on the bones of the old On30 layout.

THE O SCALE RESOURCE

NEWS, REVIEWS, INFORMATION TO USE

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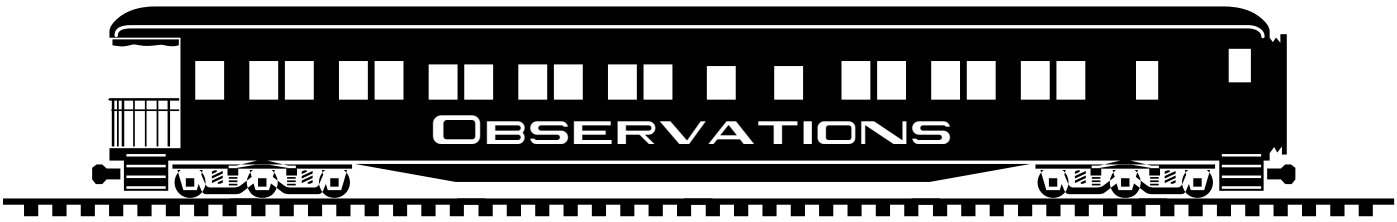

You did a good job describing IM kit assembly. (January/February 2018 issue) An IM boxcar caused me to switch from HO to O.

As the builder of over IM 60 box & reefers, I have a few different methods of construction. After the door & door hardware is glued on, but before the underbody brake parts are attached, I glue the roof on using Loctite silicone using rubber bands to hold it in place overnight (the reason for not applying the brake parts). Do not try to wipe off wet silicone - let it dry then peel off any excess. As for the spacer under the Kadee coupler box, use the coupler box cover that comes with the kit.

For more realistic ladders, grab irons and steps Chooch has these parts designed for IM boxcars, but you must use ACC to attach them.

I use silicone for many other applications like in assembling urethane kits.

Lee Thwaits

Great article as I'm planning my retirement home layout in O scale. I will be having few cars that will look great.

Rich

Hi Dan, sure could have used this article a few weeks ago. I just finished (almost), three of the IM 1937 boxcars with no instructions. Bodies came from Rails Unlimited, IM detail parts from a fellow club member who owned a hobby shop in the past and convinced IM to put the under frame parts in separate bags and body details in bags. Still waiting for P48 trucks from Rich Yoder and couplers from Protocraft. One of the cars I cut down to 1932 size by removing 9" from the middle of the body. Have also built 3 IM 8000 gal tank cars, but the twin hopper with its less than helpful diagram has me stumped.

I really enjoy the mag and good luck to Amy.

John

Daniel,

Thank you for the well writing directions on building the box car kit. I have roughly 103 box, 25 reefer and 12 tank cars of these in inventory. Hopefully I can beat your 4 hour assembly time. My recent experience is that the trucks consume a lot of time, but your solution on holding the parts with a screw in a piece of lumber sounds genius. I do like sanding the points of the wheelsets to provide scenery.

Great article. It has already saved me serious time and avoided a couple of disasters.

Thanks again.
John Goodrich
San Luis Obispo, CA

Hello,

I just read your excellent article on building the InterMountain boxcar kit and enjoyed it very much. I have several InterMountain kits of both boxcars and hoppers. I also have Mullet River kits too. I even have many Backwoods Miniatures detail kits for Bachmann On30 trains and some of their (and Train Troll) barges and cranes. I would enjoy seeing more articles such as this and also maybe even an in depth article on how to add extra details as well.

I don't know if I am typical or not, but I can follow detailed directions well, but I am not really good at winging it. For example, the detail kits to add to the Bachmann engines look great in pictures, but I don't really know exactly how to put them together to look like the pictures. It's been a while since I looked at those kits, but I remember back when I purchased them, they looked very ad hoc as to how you wanted to put it together.

I have never had an O Scale layout before, but have been accumulating stuff for nearly 60 years (BTW I am not a "2 Rail" guy, but I still like "scale" – I just have an extra rail). I have had a small HO layout when my kids were small, then had the benchwork and track laid for a large basement LGB layout in the early 80's. Then the kids got interested in other things and I began working a lot and layouts went to the wayside. So now I only have a basement packed to the rafters with trains.

My plan is to someday pare down what I have in the basement so I can have room to start a layout. I'm 66 years old and getting worried that I will never get to see my stuff running! So for now, I enjoy reading articles such as yours to give me some impetus to get going on my future layout.
Thanks, and again, keep those articles coming.

Best Regards,
Bill

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.

Rocky Mountain Train Show
March 4th, 2018
Denver Mart 451 East 58th Avenue
Denver, CO 80216-8470
All Scale Train Show
Email: Information@RockyMountainTrainShow.com
Website: www.RockyMountainTrainShow.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

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Hyatt Regency Santa Clara (San Francisco area)
Swap meet, contests, operating layouts on site, home and club layout visits. You can download the announcement in both .pdf and .txt formats from
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1st Annual Carolina Rail-Strava-Ganza
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 convenient to Hwy 16, 74, I277, and I 77. Only two blocks from the Lynx Blue Line and connections to the free Charlotte Trolley!
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.
More details to follow
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

The Cleveland 2rail O Scale Meet NEW LOCATION
November 3rd, 2018
UAW Hall 5615 Chevrolet Blvd.
Parma, OH 44130
We will again be putting on a nice dinner at the old NYC west side railroad station which is called the Station Restaurant. It is located in Berea Ohio
Email: j3a5436@gmail.com
Website: www.cleveshows.com
Sam Shumaker 440-248-3055

Reader Classifieds

Buy ~ Sell ~ 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.

FOR SALE: I'm selling my O Scale collection to move to an apartment. I've dozens of freight cars, plastic & brass, as well as passenger equipment, basket cases & unused GGD "Empire State set of six.. NYC locos, P2a,& T motor, both in stripes, Niagara484. Track and turnouts, Atlas & Micro. Books and mags. Scenery materials
Niagara484@aol.com
845-548-8354 Mike.

IF YOU BOUGHT AN ATLAS 2 TRACK BRIDGE FROM ME IN THE CANTON SHOW EARLIER IN 2017 AND FOUND THE KIT INCOMPLETE, PLEASE CALL.

FOR SALE: Atlas 40" flex track (#7056), nickel silver weathered rail, brown ties, used, but in good condition. 5 cases of 18 pieces each. $100 per case. Atlas #5 turnouts, 5 left hand (#7024) & 5 right hand (#7025). $35 each. Lenz curved turnouts, 3 left hand. $60 each. MTH SP tunnel motor PS 2.0 $190. MTH SP AC4400 PS 2.0 $200. MTH UP AC4400 PS 3.0 $240. MRC Power G 10 Amp power pack. $135. MTH DCS $150. Prices do not include shipping. Will send photos upon request.
goetzb@zoominternet.net

NEW

Reader Classifieds

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!

The O Scale Resource — Classified Listings

Manufacturers

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Proto 48

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THE O RESOURCE
NEWS, REVIEWS, INFORMATION TO USE
O 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
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 your model into the Display/Diorama category. If the building is mounted on a base with scenery, that will move the building into the Display/Diorama category. This may seem awkward, but it is the simplest way to make the distinction. The other 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 Dawdy amy@oscaleresource.com

Dan Dawdy dan@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
___Kit bash commercial model not per the kit plan
___Kit built per the kit plan >90% some modification
___RTR model with some modification <20%

Name of kit or commercial model used as basis if applicable_____

Construction techniques–Select the methods and materials that apply to your model

___Drew own plans ___Followed construction article ___Cut & fit wood ___Soldered metal
___Used proto/com plans ___Cut & fit metal ___Cut & fit cardstock ___Made patterns
___Used kit plans ___Cut & fit plastic ___Cut & fit glass ___Made molds

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 ___Transfers ___Spray ___Airbrush ___Dry brush ___Stain
___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 by_____Verified by_____

Indianapolis O Scale and

S Scale Midwest Show

Come to Indy and kick off your modeling season!

The best of O Scale and S Scale in one Show

September 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
Saturday 9am - 2pm

Buy/Sell/Trade
Modeling Clinics
Modular Layouts
Layout Tours

Meet Old Friends and Make New Ones

Please print clearly – Detach and return lower portion with payment

Name: _____
(Exactly as you would like badge printed)

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

_____
MAILING ADDRESS

_____
CITY/STATE/ZIP

Phone: (_____) _____

Email: _____

Make checks payable to: Model Railroad Resource LLC
Mail registration form to: 407 East Chippewa St
Dwight, IL 60420
Or register and pay online at:

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

 # Of 8 ft. Tables ____ $50.00 ea/$60 after 8/1/18 **$_____**

O Scale vendor ◯ S Scale vendor ◯ No preference ◯

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

Name: _____

Name: _____

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

TOTAL AMOUNT ENCLOSED: **$_____**
(No refunds after 8/1/18)

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.