Indy Show Wrap Up
Nickel Plate Switchers PT 3
Modeling US Railroads in the UK
New Tracks Rail Scale Models Drawing
Tommy Little’s Rock Island - Arkansas Division
And So Much More!
New Project Announcements

(GGD) - North Coast Limited 8 Car Set
(GGD) - B&O "Royal Blue" 6 Car Set
(Sunset) - NYC H-10 2-8-2 (Also P&LE and B&A) - Unique Tender (4 wheel truck) for B&A
(Sunset) - C&O Streamlined Hudson #490

Project Progress Report

(Sunset) - Hospital Cars - Arriving November 10th. Call For Availability. (925-820-7701)
(Sunset) - VGN EL2B - Sample Arrived, Coming January 2019, 10 Reservations Left.
(GGD) - Silver Meteor Aluminum Cars - In Production Arriving January 2019.
(Sunset) - E5/E6 Diesels - Coming February 2019, Reservations Closing Soon.
(GGD) - Heavy Weight Plastic Cars, Production Begins January, Delivery March 2019.
(GGD) - Milwaukee Road "Olympia" Hiawatha, In Design, Production in 2019.
(Sunset) - Rock Island "Rocket", Design Complete, Production of only 75 Sets in 2019.
(Sunset) - F3 Diesels - Production in 2nd Half 2019. Reservations Open until February.
(Sunset) - Krauss Maffei - Design and Production in 2019. Reservations Open.
(Sunset) - D&RGW L-105 - Design and Production in 2019. Reservations Open.
(Sunset) - 2nd Run PA/PB Alco Diesels - Production in 2019. Reservations Open.
(Sunset) - E7 (3.0) Diesel - Production in 2019. Reservations Open.
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
Rock Island FP7 Number 406 heads out with a passenger train on Tommy Little’s Arkansas Division

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.
Tall dome, wide frame

CONOCO

Narrow Gauge
TANK CARS

Ready to Run in On30, On3 and HOn3

Arriving Fall 2019

1930's - 1946
Both silver tank with green lettering and black tank with white lettering versions available.

1926 - 1930's
Tank and frame painted black with white lettering

1926 - 1930's
Tank and frame painted black with white lettering

Smoothly rolling ready to run styrene models with metal wheel sets and couplers installed.

Factory painted with numerous car numbers available for each lettering style.

As operated on the RGS, D&RGW and C&S narrow gauge lines from 1926 to 1945.

RESERVE YOURS AT www.sanjuanmodelco.com
From the Publisher’s Desk

It is with a heavy heart that I must formally announce the end of the Indianapolis O Scale and S Scale Midwest Show. The show had a good run for over 50 years, but is no longer feasible. Why you may ask? There are several reasons:

- **Space**: The amount of space needed is hard to find at a reasonable cost. We use over 16,000 square feet to hold this 2 day show. Hotels are the obvious location, however, along with the space that we must pay for, we must also guarantee at least 100 sleeping rooms per night for 2 nights (a total of 200 rooms). In addition to meeting room rental. Based on the room night history of this show, we are unable to do that. We are lucky to be able to come up with 100 room nights total over a 4 day period. It is possible that the hotel may come back to us in May, and offer us the space if they are unable to book it, but that does not look like that will happen. The Wyndham Indianapolis was able to offer us one meeting room, but at a significantly higher rental than we paid for both rooms this year, and on a different weekend.

- **Dates**: We looked into alternate dates, and even tried changing to a Saturday/Sunday show based on the request from vendors. This schedule change did not make much difference. Fall has become a prime time for weddings, so that is also a factor in trying to book the space.

- As a result of the issues above, we looked into alternate locations such as the Indianapolis Fairgrounds, and the Grand Wayne Convention in Fort Wayne, Indiana. While these locations seemed reasonable in the beginning of our search, other fees such as parking, electric, facility fees (cleaning, tables, chairs, etc.) pushed these venues outside of our budget.

- **Attendance**: Individual attendance at the show was good, and even up a little from 2017, but it was not up as much as we were hoping. Was this affected by the National O Scale show that was held a month prior in Washington, D.C.? Maybe, but we had a lot of walk-Ins, and people who did not attend the National. We had the vendors, and even published them ahead of time so attendees knew who would be there. We advertised in all the major railroad magazines, put out the word to the national societies and magazines to be included in their show listings, promoted the show at numerous other shows and utilized social media via Facebook and Internet Forums. So how do we get more attendees to the show? I’m not sure.

We would love to continue to host the show, but at this time it just is not “in the cards” as they say.

On a happier note, I hope everyone in enjoying fall & getting ready to start modeling again. This issue features some great mentors and modelers for inspiration, along with several “hands on” articles to get you in the mood. So sit back and enjoy.

Happy Reading & Happy Modeling,

Amy Dawdy
**News You Can Use**

**RailroadBackdrops.com** has released its new website version 2.0 that includes many improvements to the industry’s premier photo backdrop source.

Many of the improvements to make your backdrop ordering easier were customer suggestions. Here are a few of the upgrades: (1) All backdrops are ordered by the physical size and the scenes are resized to be scale specific. (2) O Scale is now specifically offered and no longer shared with G Scale (3) Pricing and material selection is now on the main Backdrops page so you can easily see the cost and compare cost between available materials (4) Added both an economy presentation paper line and a super ultra premium vinyl line of materials to compliment our proven ultra premium polypropylene film line (5) A new “Wish List” so you can select, sort and compare various backdrop selections back to back to see how they work together or get custom blending ideas (6) Nearly 500 backdrop scenes and 50 interchangeable sky/cloud formations.

These are just a few of the upgrades to the industries best photo backdrops at [www.RailroadBackdrops.com](http://www.RailroadBackdrops.com). Enter the code OSR100 in the coupon code box at checkout and you will get 20% off your backdrops.

**Rails Unlimited** showed some Milwaukee Road cars at the Indy Show.

The Milwaukee Road single sheathed boxcar is a former Chooch kit, now with improved masters and includes a roof. A class of 9000 cars was the signature Milwaukee car prior to the ribside cars and continued to work along the ribside cars into the 1960’s, and then latter in MOW service to the end of the Milwaukee Road.

**Rusty Stumps Scale Models** manufacturers of quality kits and detailing items in HO, S and O scales announces the Green Valley Pump House Kit in HO and soon O and S scales.

The GV Pump House kit has taken its designed from an actual building in a railroad setting.

See their Website for more details.
This is a Craftsman Kit using 1/32" plywood sub-walls covered with 1/32" Basswood engraved with the brick detail. The basswood brick siding is slotted at the ends so that the same feature on the intersecting walls intermesh just like brick is laid up on a full scale building. The same features are provided on each scale except that the basswood is 3/32" thick on the S scale and 1/16" thick on the O scale kits.

All detail items, windows, doors, vents and chimney are 3D designed and 3D printed in high quality liquid resin for fine details.

10 page well illustrated and detailed construction manual to help make assembly easy. Many photos and 'how to' notes are included.

See their Website for more details.

SoundTraxx’s new Tsunami2 EMD-2 Digital Sound Decoders are now shipping. The EMD-2, which adds an additional 8 EMD prime movers to the Tsunami2 sound library, provides high quality onboard locomotive sound, precision motor control and brilliant lighting effects.

The new Tsunami2, EMD-2 is available in five board formats (listed below). These decoders have all of the features that Tsunami2 Digital Sound Decoders have to offer including: over 50 sound effects including engine startup and shutdown, engine prime mover through all eight notches, straight-to-8, HEP mode, 14 bells, over 40 airhorns, 4 air compressors, dynamic brakes, radiator fans, brake squeal, and more! Tsunami2 decoders also contain the first ever Reactive Diesel Dynamic Digital Exhaust for more authentic operation.

New EMD Prime Movers:

<table>
<thead>
<tr>
<th>EMD 567 12 Cylinder No Transition</th>
<th>EMD 645F 16 Cylinder Turbo</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMD 567C 16 Cylinder Non-Turbo</td>
<td>EMD 645E 20 Cylinder Turbo</td>
</tr>
<tr>
<td>EMD 645E 12 Cylinder Non-Turbo</td>
<td>EMD 710G 12 Cylinder</td>
</tr>
<tr>
<td>EMD 645E 12 Cylinder Turbo</td>
<td>EMD 710G 16 Cylinder</td>
</tr>
</tbody>
</table>

SoundTraxx is shipping NEW Tsunami2 Steam-2 Digital Sound Decoders with an expanded sound library.

The new Tsunami2, Steam-2 Digital Sound Decoders feature 90 whistle selections and are be available in four board formats (listed below). The Steam-2 decoders replace the original Tsunami2 Steam decoders. Tsunami2, Steam-2 decoders have 28 new whistles (over and above the whistles on the original Tsunami2 Steam decoders) and it includes all of the features that Tsunami2 Digital Sound Decoders have to offer including: over 50 sound effects including 12 bells, a new total of 90 whistles, 10 air pumps, 8 dynamos, 10 exhaust chuffs, snifter valve, injectors, Johnson Bar, power reverse, firebox blower, side rod clank, brake squeal, and more.

A SMALL SAMPLE of the whistle selections offered:

<table>
<thead>
<tr>
<th>ATSF Step Top 6-Chime</th>
<th>Frisco Step Top 6-Chime (Road)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D&amp;RGW Flat Top 3-Chime</td>
<td>SP Step Top 6-Chime (Road)</td>
</tr>
<tr>
<td>Nathan Step Top 5-Chime</td>
<td>SP Step Top Desert 5-Chime</td>
</tr>
<tr>
<td>L&amp;N Passenger 3-Chime</td>
<td>W&amp;LE Step Top 5-Chime</td>
</tr>
<tr>
<td>N&amp;W Step Top 3-Chime (611)</td>
<td>CB&amp;Q Step Top 3-Chime (Road)</td>
</tr>
<tr>
<td>Hancock 3-Chime (3985)</td>
<td>ACL Round Top 3-Chime</td>
</tr>
</tbody>
</table>

See their Website for all the details.
Rusty Rails is back with more new castings. This time it’s a junk pile that would look great behind a foundry or machine shop. Also a great junk pile for your mine site. The center of the junk pile is the air tank which was used to support drilling in mining and could be used in foundry shops that needed an air supply. Check out the detail on the castings like the old mine car etc. Castings come unpainted. The casting measures 3 1/2” long by 3” wide and 1” tall.

Also, we have a set of castings that are dust collectors that were mounted on the roof or the side of a manufacturing building. You add these to existing building on your layout to add to the detail. Castings come unpainted.

See their Website for more castings.

Bill Basden from Delta Models has some new products of interest: Item DM 275 Pullman one piece roof casting. I have added a new roof with add on parts to go with it.

The new roof DM 275A Observation roof section very similar to DM 275, but is only 17’ 5” in length, this will mate up to the following below:

DM 326 blunt roof section no headlight
DM 327 Pullman roof section small 10” headlight
DM 328 Pullman roof section large 14” headlight
DM 329 Buffer skirts section with coupler pad predrilled for Kadee 800 series coupler boxes

These were designed to be used with American Lightweight Car, as well as, American standard and Union station Products kits

Also of special note: With the release of the SSM 3rd rail Texas & Pacific 2-10-4, I will be offering a 8,000 gal Water car to go with the model. This is a very unique type of car and was used on most tonnage freights for water on trains in West Texas.

This will be an all brass water car that will be a very Special order item with 6-8 week delivery. The starting point for the model is the stabled USH no. 301 car. This will come assembled with working filler hatch and painted box car brown and decaled in white lettering.

If you are interested in purchasing a model, you may do so from the website. It should be up on the site with a sample shortly in the new items area price to be in the $500.00 range as I am only doing 8 models.

Atlas O has a new special paint scheme for their Trainman 60’6” Rail Box.

On Track for a Cure is now available. 2-Rail cars feature scale wheels and body mounted scale couplers.
Also new from Atlas are their 3D Printed Scene Accents including fire hydrants, pallets, acetylene tanks, oxygen tanks and propane tanks.

Both models are fully functional, made of brass and have a 3V LED light for illumination. As of this time, the models are special order only. For ordering information, contact Larry Stanley at aatlarry@earthlink.net or call 256-653-7215.

Richard Rands from Berkshire Valley Models has some new products. #657 5 Gallon Pails - 4 per package for $3.00 and #658 5 Gallon Square cans - 4 per package for $3.00. Both products are made of unpainted white metal and include decals.

Richard also included an older #468 300 Gallon Fuel Tank which is a white metal and urethane kit and retails for $12.95.

See their Website for all their exciting products.
Custom Lit 3-Pc. Configuration (36” L x 13-3/4” T)
Available from 2- to 6- stories tall, Lengths in 12” increments
www.toddarchitecturalmodels.com
for stock items or contact directly at
(973) 507-4072 for custom configurations

Altoona Model Works
AltoonaModelWorks is taking preorders for the Omaha Station
This will be Cast urethane kit with mix of laser cut wood & plastic parts. Model features a removable base and will have optional lighting and super detail kit.
Visit our website: altoonamodelworks.net
AltoonaModelWorks / 2172 Cross Cove Rd
Martinsburg, PA 16662

Delta Models
DM 320 Pullman
Dome Stair Annex Module

Wasatch Model Company
Last Call
41-N 41-CUDO 61-UDO 2410 HeavyWeight
wasatchmodels.com

Model Trolley Specialist
For Over 40 years

St. Petersburg Tram Collection
Car Works * MTS * Q Car * Bronze Key
Ken Kidder * LaBelle * Clouser * Ashland
Parts * Trolley Poles * Power Trucks
Kits * Overhead Wire & Fittings
NEW TORONTO CLRV KITS ARE NOW SHIPPING!
KIT INCLUDES INTERIOR, UNDERBODY AND NEW DECAL SHEET
NEW PCC KITS, ILLINOIS TERMINAL INTERURBANS & MORE COMING!

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

Allegeny Scale Models
O Scale Locomotives & Rolling Stock
Sales, Collections, Consignments, Appraisals
Brass, Custom Built Models, RTR, Kits, Decals
470 Schooley’s Mountain Road, Suite 8-117
Hackettstown, New Jersey 07840
www.alleghenyscale.com
PH: 908-684-2070 FAX: 908-684-8911
oscale@alleghenyscale.com

SBS4DCC.COM
www.sbs4dcc.com

SoundTraxx
www.soundtraxx.com

ESU
www.esu.de

Tsunami 2
www.tsunami2.com

WOWSound
www.wowsound.com

DCC Concepts
www.ddcconcepts.com

PCC Specialists
www.pccspecialists.com

Digital Decals
www.digital-decal.com

Zimo
www.zimo.de

www.southernpacific.com

Received over 400+ decals for steam-diesel era freight cars for “as-delivered and repair schemes” from 1938 to 1969, with over 650 decals representing 200 roads.
Available at protocraft.com

O Scale Decals
plus limited HO decals

PROTOCRAFT™ DECAL LINE

Stevenson Preservation Lines
Kits and Parts From Past Masters
New Kit
New York Central
0-6-0 Class B-11
Nickel Plate
0-6-0 Class B-11
www.stevensonpreservationlines.com
Mentor Definition: A Trusted Counselor or Guide

By Contributing Editor Jim Kellow MMR

A Great Manufacturer and Talented Modelers Who Can Help You Improve Your Modeling and Be Your Mentor

I saw this quote on the Internet and just could not resist using it to start this article. I truly believe there is truth in the quote for model railroaders.

Before we get into this article I want everyone to share a message from Bill Chaplik about 3D O Scale Parts.

The Future of O-Scale?

One of the hobby’s premier suppliers of 2-rail O-Scale, Atlas, has used “the future of O-Scale”, as an effective advertising slogan for some time. They are right, but the future may also point in more than one direction. The introduction and growth of 3D printing has opened up possibilities that never existed before in our hobby. For decades, a modeler desiring a specific locomotive, car, or detail part had to scratchbuild it. The new technology allows the creation of small volume, highly detailed items that are exactly what is needed to complete a project; and would never be marketed by a large supplier.

One company which has emerged to serve this new and growing market is Shapeways. They are themselves a larger company with offices in both New York and the Netherlands. Also, they are not a model railroad company at all. The demand for 3D printed products seems to be boundless. The benefit to model railroad enthusiasts here is that many have designed items we need (in all scales) and allowed Shapeways to market them. There is a small problem with this. Shapeways, not being a model railroad firm, is challenged in their attempt to bring supplier and potential customer together. Their Internet page for model trains currently omits any mention of O-Scale, while naming and giving the prototype-to-model ratio of the other scales. I would suggest that persons interested in a convenient and simple search for O-Scale offerings will contact Shapeways and suggest to them that our scale not only exists, but deserves inclusion in their search engine. Shapeways is of course not a monopoly in the 3D printing field. Other companies and even home 3D printers will continue to expand the boundaries of this new part of the hobby.

I hope you will consider adding this new resource to your modeling toolbox. I have ordered some items and am delighted with them. One part was even offered only in HO until I asked if it could be scaled up to 1:48. The
designer said yes, and I have the part unavailable before and unlikely ever to be made. The future of O-Scale? It may be a multiple-track mainline!

Bill Chaplik

It seems to me if O Scale is the only model railroad scale not included in the list of sizes that are available from Shapeways, we have a problem. Shapeways makes 3D O Scale parts, but they are not advertising they do? This can certainly not only limit the demand for their O Scale parts it, also limits O Scale modelers’ ability to know about parts that are available and experiment with this new technology in their model building.

Bill Chaplik posted in an O Scale Facebook group about this issue, and suggested that modelers email Shapeways to get them to include O Scale in their advertising of 3D parts. Michael Osweiler sent a email to Shapeways and posted in the same O Scale Facebook group the response he got.

“Thank you for reaching out. We appreciate the feedback and suggestion, I'll make sure to forward it to our product team. However that said, we are currently de-prioritized changed to our marketplace, so while I think it's a great idea to add this filter, we won't be able to add this anytime soon. Best, Mitchell”

Since individual emails did not work, how about we get together through this magazine and have Dan Dawdy accumulate a list of readers as a group to ask Shapeways to list O Scale parts in their advertising. If you want to be a part of this effort, please send an email to shapeways@oscaleresource.com Dan will prepare a listing of all modelers who responded and send it to Shapeways with our request to include the availability of O Scale parts in their advertising. I hope you all agree that this is important and respond. I also hope Shapeways will see the value of having O Scale modelers’ support. Thanks Bill for raising this matter, now back to my “New Tracks” article.

Well, I again had a reader of my “New Tracks” Mentor series tell me about a manufacturer he likes and recommended I contact the company about being in one of my articles. So I contacted Stephen Milley, the owner of Rail-Scale-Models to see if he was interested. I found him to be a great guy and an experienced model builder. He did not hesitate to be a part of my mentor project. I believe his company is an excellent addition to those firms we have spotlighted before, and I know you will be pleased with his products and service.

WELCOME TO RAIL-SCALE-MODELS
A great source for model railroad craftsman parts, kits, custom scale structures, and laser-cutting services. Details about their products can be found on their website at www.rail-scale-models.com, and includes the following:

Rail-Scale-Models acquired the Laser-Cut Details product line from Rusty Stumps Scale Models. This line-up includes over 300 unique items within many categories: Windows & Doors, Roofing, Ladders & Stair Stringers, Fencing, Crates & Pallets, Wall Materials, and other miscellaneous details. Many of the products are available in different colors and on different materials – giving the modeler plenty of choices. The product line covers the popular model railroading scales: N, HO, S, O; and many items are offered in other scales: TT (1:120), OO (1:76), 1:35, and G (1:25). This line-up of laser-cut detail components is combined with the craftsman structure kits that Rail-Scale-Models already offers in N, HO, and O scale. The addition of the Rusty Stumps collection gives modelers a one-stop location for complete structure kits and scratch-building components.
Available Services:
- Design Development in CorelDraw or AutoCAD.
- Laser Cutting & Engraving of a Variety of Materials:
  - Scale Siding: Clapboard, Board-and-Batten, Scribe.
  - Custom Engraved Siding: Brick, Block.
  - Basswood, Plywood, Laserboard, Matboard, Card-Stock, Paper, etc.
  - Acrylic, Styrene, Acetate.
- Variety of Other Materials Available:
  - Stripwood, Window & Door Castings, Roofing, Corrugated Panels.
- Production in Any Size Batch.
- Competitive Rates and Short Lead Times.
- All Work Completed in the USA on USA-Produced Laser Equipment.

If you're looking for a partner for your next scale structure project, contact them at Rail-Scale-Models.
RailScaleModels@yahoo.com

When I talked to Stephen about his model kits and providing mentoring to the winner of his contests, he suggested a good model kit for the project would be The Tobacco Barn kit.

Stephen believes this model will be an excellent representation of his product line, an excellent learning experience, and result in a finished model the modeler will be proud to exhibit on his layout. I wish all of you the best of luck going down these “New Tracks” with Stephen and his Company Rail-Scale-Models.

Click the button to enter the Rail-Scale_Models drawing. Must enter by December 14th. Winner announced on or about December 18th.
(Only one email may be sent by each modeler)

I look forward to see the winner’s completed model and hear his/her comments about their model building experience with Stephen.

Again, I wish everyone good luck in this contest and best of all have fun going down these “New Tracks”.

The O Scale Resource November/December 2018
Talented Modelers who can be your Mentor

I want to now introduce you to some talented modelers who can be your mentors and help you improve your modeling abilities and confidence. I know you will enjoy meeting these modelers and seeing the “New Tracks” they can help you travel.

I believe modeling confidence is critical in making a talented modeler. With confidence in your modeling skills and abilities, you know you can build anything you want and be proud of the finished model. So how does a modeler get confidence in his modeling skills and abilities?

As a NMRA Regional Achievement Program Chairman, for three different regions, a NMRA Contest Chairman for two different regions and a model railroad author for many years, I have met numerous modelers over the years who have told me they did not believe they could ever be a talented model builder, or get NMRA awards or win contests. In many cases, the reason for their belief was either a lack of confidence in their modeling ability, or even worse, a fear of trying and failing. I can understand such feelings as I had them in my early modeling.

I truly believe a modeler can eliminate his fear and gain confidence, if a person, friend or even someone they do not know, who is a skilled model builder (I call these people mentors) convinces him or her to try to build models. Almost every talented model builder I know has started with some lack of confidence and overcome it by building models.

The difference in a talented model builder and a modeler who does not believe they can ever become talented, is that the talented modeler is a trial and error builder, who has made many errors, who never hesitates to try building something new. These modelers have found a way to overcome their fears and achieve their model building dreams. You can to. All you need to do is try.

For some modelers, this has required a long up and down trip, and having one or more mentors to rely on for help. For others, it is just gut determination and continuing to try to build great models. Either way, they did get there.

I want to introduce you to Shaun Leonard, a talented modeler, who I believe you will find as inspiring as I do. He has overcome challenges that many would find defeating and success in achieving his dreams. I hope his journey will encourage others to find their way to becoming a talented modeler and achieve their dreams. Naturally, Shaun and I agree that a mentor can expedite the trip and make the whole process easier.

Shaun Leonard

My name is Shaun. I am age 52 living in Sheffield UK with a population of around 500,000. Sheffield has a history associated with steel making and heavy industry. We boast the oldest Soccer football team in the world and the Manner castle where Mary, Queen of Scots was imprisoned.

I work on our busy railway station looking after the 1st class lounge and dealing with all customer service enquiries. A suitable job then, for someone who has had a love affair with the railway from as far back as I care to remember.

But where did it all start? It must have been at the end of the 1960s when I was about three or four years of age. Very often my late mother and I would walk a black Labrador through the...
town centre and over the high-level railway bridge that crossed the River Medway in Maidstone, the county town of Kent. The railway ran parallel to the footpath (sidewalk) separated by about 6ft. separated by sturdy iron railings. So close up and personal with the trains, but quite safe.

Every two weeks I would go with my mother to the Moorefield eye hospital for examinations and tests because I have limited vision. This required a train journey to London’s Victoria station. After a sound breakfast at home and short walk down to the East station, then into the booking office that straddled the lines and a run down the ramp onto the platform, we would be on the warm electric train to London. If we were lucky, we would see the Dover boat trains pass through the centre lines, as Maidstone was a diversionary route for over running engineering work. I think we may well have seen the Golden Arrow or Night ferry, I’m not certain as it was such long time ago now, almost 45 years.

After the usual progress through a plastic train set, my brother’s three rail metal Hornby Dublo set and my first 8 x 4 layout, it was obvious where my heart was taking me!

Let’s jump forward to 1985. It is September. I move into my first independent home. It was a first floor flat, something I think you would call a ”condo” owned by the local authority. There are two main rooms, a kitchen and bathroom. By this time, I had collected several engines, wagons and coaches.

As a moving in present, my late father built me a very well constructed set of baseboards that could easily be assembled or dismantled. I use the standard “set track” as I do not know how to cut and form flexi-track or streamlined points (switches.) One room is commandeered for the railway the other becomes a bed-sit.
Because of my limited vision, I do not know how to build scenery and do not have the confidence to do so. Any attempt usually ends up a mess so I simply give up and enjoy running the trains. At about this time, I made an attempt to join a local model railway club in order to learn basic modelling skills. Sadly, I met with considerable indifference: “We don’t have time to show you.”, “Do you have to touch things?”, “Can you ask someone else?”. In a couple of cases “Why are you here if you can’t see what you are doing?”.

It is reasonable to say being in my mid 20s I had a lot of growing up to do, but some of the very unpleasant, dare I say offensive, behavior I experienced made what confidence I did have take a very steep nose dive. So I went away and did my own thing. The following year, I moved to another flat and my father gave me another two sections for the layout. Before long, additional track was bought and the layout extended. Although little, if any, scenery was added, the layout was interesting enough to run with two proper junction stations and a good continuous run. I wanted a Midland mainline feel so called it Sheffield central. It ran in that state for about 9 years when a friend promised to help me start over. We agreed to dismantle it and prepare a new track plan. Once dismantled and packed, away he found he was unable to deliver on his promise, This was a low time. I gradually sold off the stock, keeping the controllers and track for “another time perhaps”.

In 1995, an opportunity arose for me to visit Sheffield with a view to moving. I seized this with both hands, and following a couple of weeks, I decided to go for it. Right in the centre of a superb transport network with large towns and cities nearby, it seemed to make sense to make a fresh start.

By this time, there was little of the original railway, only a box of track, control unit and baseboards. I had moved on to other things. Although I did continue to visit model shows and looked at the local shops. Despite a brief dalliance with the hobby, everything was finally sold.

The early 2000s were a difficult time having lost both parents and having to deal with an extremely sensitive personal matter. I had by this time made some wonderful friends who were more like family to me than anything else. Upon the death of my parents, I came into some money. Although not life changing, there was enough to clear some debts and look to the future.

What do most people do at this time? Buy a new car… hmmmmm that’s not going to work for me! Blow it on an expensive cruise… well that’s not my thing. OK, a super sized LCD TV screen with all the latest features? Or could I? Did I dare consider revisiting railway modelling?
Things had come such a long way. Hornby was trying to shake off their toy-like reputation and Bachmann, the much-respected American makers, had made strides in the UK market. Also Heljan, a maker of plastic kits appeared in the UK. It was an exciting time. DCC had started to become a practical solution.

By this time, I had moved into another local authority property where I had space to use one room as a "den". After much discussion with an old friend who had moved to the Midlands a few years previously, we decided to go for it. Measurements were taken, plans drawn up. We were on the way. Sheets of hobby board and lengths of 2x1 and 2x2 arrived. There were numerous visits to stores for screws, nails and the thousand and one bits you need to get started. Then one bright day in May, we made the journey to Hatton’s of Liverpool at their old Smithtown Rd. shop to acquire everything that would be need to get started in earnest.

Hatton’s of Liverpool has built a well deserved reputation for being the premier seller of all things connected with model railways. They were also known for being able to offer generous discounts. This was one of those days where the word compromise did not apply. It was a chance to start over and obtain all that was the best without worrying about price. Some two hours after entering the store, we had acquired so many boxes it took about four people to get them loaded into the car.

Once home, everything was stored ready for construction when I had some annual leave. I knew somebody down on their luck who told me he was a joiner, looking for work so I commissioned him to build the base boards. All seemed to go well as part of the first section went up. However, he went off for his lunch and I never saw him again. Another friend stepped into the breach, and within three days the boards were up. It took several months to configure the flexible
track and streamline points. Changes were made, and sections adjusted until I came up with a “working prototype”.

Knowing I had no skill with scenery, I realized it would be a case of keeping it simple and just make it a place to run and display beautiful models. Once again, I attempted to join a local society, but it sadly reflected my previous experience. However, one member in particular would change that. Each week he would drive me home where we would chat and have a sociable cup of tea and talk model trains and “shoot the breeze”.

I explained the difficulty I had and the lack of confidence that prevented me doing anything of much worth so he showed me the basics of how to build platforms using Metcalf cardboard kits. These are great because they are pre-scored. It is simply a case of bending the components to shape and gluing them together, following clear instructions. Almost like magic I was able to build models, customize them and even apply simple weathering. He had somehow “given me permission” to believe in myself for the first time; there was no stopping me! A large station appeared on one side along with several warehouses and signal boxes. My friend built a superb tunnel to cover one corner. Within 18 months, I was scratch building, having mastered the use of Kraft knives and rulers.

Having somehow acquired these basic, but essential skills, I set to with gusto. The first major project was to build a basic replica of Nottingham’s Midland station. This consisted of the booking hall and huge disused girder bridge that carried a long disused line over the station. It also involved totally relaying much of the track through the station for a more prototypical look. Several other bridges were built to help cover up the curved track along with office blocks and multistory flats. In the place where the fiddle yard would be expected, I added a small completely scratch built station. The fiddle yard is now a firm feature of the layout where trains could be assembled ready for use. The most recent construction was a representation of the London Rd Bridge to the west of the station. There was also a complete rebuild of the small depot.

By this time, I had started weathering my own rolling stock, something I would have not dared to contemplate hitherto. This was achieved with the use of water-based poster paints. I was even asked by people to do similar work to their models. The big advantage was if I messed up it was just a case of running the model under cold water and starting over. Engines were a different matter because the type of dirt and grime is far finer requiring a spray gun; something I would never be able to use.

During the last 10 years, the layout has become a focal point for many friends and many regular running sessions. There is always room for improvement, but I enjoy this so much and have gained a great deal of satisfaction knowing I have made something worthwhile.

Most years the layout is used to raise funds for our local Children’s Hospital by running an authentic schedule for 24 hours. Teams of friends take it in turns to run trains, provide endless drinks, sandwiches and generally have a great time together keeping each other awake for that killer time of 3am! Over the past decade, we have raised about £1000.

For me, it has been a voyage of discovery. There have been some very dark and lonely places, but these are far outweighed by the positives and mostly wonderful people with whom I have come in contact. I have learned it is about self-belief and accepting the things that will forever be beyond me, but not being afraid to ask for help when needed. I have also found a wonderful group of people at another railway society who have also become firm friends, and I even hold a position on the governing committee.

If you think I can help you in your modeling, please let me know by email at Shaun.Leonard@oscaleresource.com.

I hope Shaun’s story gave your confidence a boost as it did for mine!
Bill Chaplik

There is no question in my mind that Bill is a committed O Scale modeler and promotes O Scale every chance he gets. I appreciate his involvement in my mentor project. Please meet Bill Chaplik:

Because interest, in both real and model railroading, has declined in our country today, I am very interested in attempting to assist the next generation of 2 rail O Scale modelers in picking up hints and techniques I've accumulated over the years.

Although I am unable to remember it, family lore says that my interest in trains began at the age of two. During the Christmas season of 1948, my mother took me aboard a ship named the Queen Mary, and they had an electric train circling a huge Christmas tree set up in the grand salon. I'm told that I nearly leapt out of my mother’s arms upon seeing this train. My interest never seemed to wane after this, which led my railroader grandfather to buy me a Marx trainset at about age 5.
Because I was careful with this prize possession, I was graduated to Lionel for several seasons following. At age 13, I discovered HO. Its realism caused a permanent shift away from 3 rail. I enjoyed, and still enjoy, HO scale railroading, but about 1982 I was given an assignment from a fellow model railroader to paint and decal some 2 rail O Scale boxcars.

This seemed quite intriguing, and prompted a scale shift to the larger gauge. I attended my first O Scale National Convention in 1984 and met the late Dan Henon, publisher of O Scale News/48 ft aboard the Broadway Limited on the way to Chicago for the convention. I subsequently wrote several articles for O Scale News. My railroad was featured as a cover story.

I also met Myron Bigger, who took over O Scale Railroading, renaming it O Gauge Railroading because of his 3 rail interest. Myron also published a cover story on my 2 rail model railroad. In my work life I was a professional railroader, putting in 32 years with Amtrak and twelve years as a consultant for Hudson-Bergen Light Rail. With two partners, in 1982 I helped start a monthly prototype magazine, Railpace Newsmagazine, which has put out an issue every month since May, 1982. Railpace has also published about eight soft and hard-cover prototype railroad books. Today, I model with the great people at the Reading Society of Model Engineers club in Fleetwood PA. Along the way, I've managed to pick up some information to be gladly shared with others on the following subjects:

- Train Operations
- Northeastern US Railroad history
- Signalling
- Prototype operating rules
- Soldering-DCC
- Painting and Decaling
- Model construction
- Trackwork
Mindful of the fact that a little knowledge can be a dangerous thing, I must point out that I do not consider myself to be a master on any rail subject; only to say that I have had more than a little exposure to the subjects listed. I can think of no better purpose to put accumulated knowledge than sharing it with those possessing a genuine interest.

Attached are a few photos of my modeling. Please let me know at Bill.Chaplik@oscaleresource.com if there is anything I can do to assist your efforts. I look forward to hearing from you.

Tony Burgess

This is a little different approach for me to introduce a mentor to you. But after talking with Tony, I believe his approach to building a kit will provide you with an example of kit building at its best, and hopefully encourage you to build a kit yourself using some of Tony’s methods. Please meet Tony Burgess and his building of Feller’s Garage.
This is how I built Feller's Garage kit by Monster Modelworks. I call this “Taking a kit to the next level”.

I have always loved building models as close to the prototype as possible. When I found out Jimmy Simmons of Monster Modelworks based his kits on prototype buildings, I was immediately drawn in. When I bought Feller's Garage, I had no idea of the journey this would take me on. Before I started building it, I Googled Feller's Garage and found it was located in Pittsburgh, PA. I zoomed in to get some street views and was surprised to find there was a lower 'first' floor. I was even more surprised when I did a virtual street walk and found the railroad bridge around the corner was the Norfolk and Western, the same road I model. It also runs in front of the garage on the other side of the street.

Unfortunately, I couldn't see much of the 'ground floor' from Google except for some windows and a garage door. At some point during the build, I reached out on Facebook and was delighted when Bill Sartore, to whom I am greatly indebted, sent me a zip file of some 26 very well detailed pictures he took in 2009. Now it was 'game-on', and I was itching to get started on the garage.

The building is situated on a hill, and half of the lower floor was buried within the hill side. I could see this was going to be an interesting and unique model to build. I took notes of sizes by comparing the model to the photos. The lower floor had some matching windows, and a white roll-up garage door. I wanted to have the same door and windows as the upper floor, but I didn't have anything that matched the kit’s fine windows. I reached out to Jimmy Simmons at Monster Modelworks, and asked if he could make some more windows
and a door so I could build the second floor, and would gladly have paid for it. I was very pleasantly surprised
that he said yes, and would only charge me postage. I can't tell you how grateful I am, and it wasn't long before
I received the windows and door. In the meantime, I had already built the walls of the 'upper floor' from the kit.
I didn't vary much from the kit, at least not yet. It is an excellent, well thought out, and apparently accurate
model of the real building.

The upper floor and first floor have different style bricks, and since I make a lot of my own plaster walls for
other scratchbuilds, I happened to have a mold that matched perfectly, which also has scribed brick detail on the
ends of the castings. I only needed 3 walls, as most of the lower floor is under ground. To prepare the plaster
castings, I used my Delta belt sander to sand the backs and square up the bottom and top edges. I measured the width of the model
and found my castings were too short by .470". So I sanded off one side of the rear wall to remove the
carved bricks and cut off a section from one of the other castings, matched up the brick pattern, and
 glued it on to the end of the rear wall with white glue. When it was dry, I braced the rear with some
1/4" basswood at the joint. I then used a little soupy plaster to fill in any gaps, and fill a few air bubbles that always
seem to make it into my molds, then cleaned up the bricks a little; good as new.

I did have one other problem with the castings; they had bowed outwards about a 1/16" towards
the center. At first I said I was going to let it go and live with it, but I couldn't, so I proceeded to fix them. What I do is scrape some plaster off the face with a razor blade and file and re-scribe the bricks back in. Plaster castings are so easy to work with.

I then cut the window openings on the stone walls, and would like to share how I do that. The tools I use are a machinists square, an eye dropper for water, a heavy duty X-Acto chisel blade, a #19 works well, and a #17 straight chisel blade. I also use a tooth brush for cleaning out debris while carving the plaster. Using a machinists square, I lay out where the windows will go with a pencil. I also use the square to start the carving: running the angled chisel against the square blade and cutting just shy of the lines. First, I douse the area with an eye dropper full of water to soften the plaster. It will soak in quick. I cut up to my layout lines around all four sides. If it dries too quickly, I add
more water. It's amazing how porous this stuff is, as it will take a lot of water. Then, with the #17 flat chisel, I come in and create a wedge opening from the inside towards my scribed line, a 1/2 'V' shape if you will, creating clearance as I keep cutting down and clearing away the slurry. I'll go back and forth with the two blades, cutting a little deeper, then chisel out a bit more until I am all the way through. The 'V' cut is to give the heavy chisel room to cut, and clears out the plaster so it won't crack or bog down the blade. When it is very thin on the back side, I can tap out the remaining plaster. At this point, my window will be slightly undersize.

Now to finish up. First, using the angled chisel, I scrape the inside edges to clean up all that isn't needed. When I get close to size, I try the window to see how close I am. With luck, I should be a hair undersize. I made a styrene template the size of the window to save having to dirty the laser cut window, and/or breaking it. When it is very close to size, I bring back the square, placing the edge on the outside of the window opening, and with the blade against one side that needs to be widened, I shave straight down, like shaving a bit of ice, or planing some wood, a little at a time, no need to hurry. When I have it all done, and the size is perfect, I start the next window. Using the square at the last step keeps me from digging into the wall at an angle, and keeps the blade straight. Each window doesn't take long, maybe 5 or 10 minutes. I lose track of time when I am this involved, and it seems longer than it really is. I later used a soupy mix of plaster to fill in some bricks to represent the cap stones.

The 'extra' kit door I received from Jimmy was a little too wide for the door I needed below, so I cut it in half removing the width of one set of windows. I used squadron putty to hide any seams after gluing them back together. For painting, I used cheap craft paints from Michaels. Various weathering powders from Dr. Ben's were used for the weathering and rust areas, as well as on the building itself. I didn't want to add too much rust on the doors, as this model would be in the late 30 or mid 40's era, but the lower door got a little extra since it would be more susceptible to water running down hill. I sprayed the windows with Dullcote to give a dirty look from inside. I also added a couple of details to the doors, a 'T' handle in the center and some brass wire for the lower handle to raise the door.

The building as supplied by Monster Modelworks and was essentially built as is, but I did make a few changes. One was the signage. I made several copies of the CHAMPION signs, as Jimmy suggested in the instructions, and used a technique I discovered while trying to make a sign thinner for another model. I first sprayed the
front with dullcote and let it dry. I then turned it over face down, used an eye dropper to add water to the back side, and using a razor blade, scraped away the back paper, rolling it up like a carpet, from the top edge down. On large signs, some tearing might be inevitable, but that is ok, as this sign, on the real building, isn't exactly devoid of holes either. I also was trying to duplicate the tearing and weathering of the
real one too, so some of the sign was deliberately torn away. Once applied to the building with white glue and dabbed in with a brush, I cut around the upper and lower red and black banners, and also above and below the CHAMPION word to remove the inner white areas. This showed the brick wall better. I noticed on the real building, a ghost image of some previous sign. I used a little light blue and painted that in above the Champion sign, and added the other Feller's Garage sign from the kit above that. I added a light over the sign from GRS, and a battery with switch under the foam foundation. The west side door also had some concrete stones above it that looked like they were shifted or later added due to a change in door height or something. So I cut a small area out from above the door, took it out and reversed it, and shaded it to look like there was some rework done with older brick. To weather the walls, I used pan pastels, which give it a really nice worn dirty look that I like. I also darkened the lower bricks more rather than the slightly darker grey the real building has. Just my preference.

The two doors to the building were numbered 3834. To replicate these, I used some brass numbers on the side door from a set I bought from an English company, Scale Link, and for the front, I wrote the numbers using a very fine red ink pen. I wrote the numbers on a piece of paper I colored black with a marker, cut out to size and applied to the door. I can write small, but this was a little bit of a challenge, and took about a dozen tries to get it right.

One aspect of the model I knew I was going to do from the beginning, was the front driveway and pavement; it has a unique look and provided me with another challenge. I cut a piece of plywood the size of the street/pavement area, built a stripwood dam around it and poured in some plaster. Once dry, I removed the forms and marked off where the pavement was, the step, the concrete expansion joints, etc. and using a razor blade, while wetting the plaster, I essentially scraped away what shouldn't be there. Quite time consuming, but worth it. After a little refining here and there, and getting the sweep up into the garage just right, I used an acrylic concrete craft paint to paint in the color, and used Vallejo Air paints to spray on a mix of sand and a light grey, then went over with some light brown soft pastels, then a shot of dullcote to preserve it. I then built up the foundation underneath to bring the 'street' up to the right level.
I had received information that originally the garage had old glass type gas pumps for Atlantic Gasoline, and at one time, they had an Atlantic sign on the side of the building, which in part may still be seen. I wanted to use the old glass pumps and contacted David at JL Innovative Design to see if he had any pumps with that sign. He didn't, but he said he could make some. I sent him the design I would like and the color of the pumps, and he made up a set with a bunch of extra signs. All I had to do was add a little mesh for the glass screen and some hose, made from .015" solder. I tell you what, I am amazed at the generosity and help I have received from model manufacturers! I owe a lot of what I was able to achieve to them. Anyway, once the pumps arrived, I installed them in what I thought would be the right spot, as I could not see any evidence of where they were originally. I also made a small plaster island for the pumps, matching the colors of the concrete drive.

Studying the prototype photos revealed so many details, I had to take in one area at a time. When I went back, I saw even more I missed. I tried to replicate most of them. The piping and electrical conduits were made from brass or styrene, counting the number of bricks over from the front to get the right placement. Jimmy's model replicates the number of bricks perfectly, and I had no problem getting the right look. On the left side of the model was some rather interesting wiring going into some conduit, which was also attached to the power lines. I left the power lines off until it will be placed on the layout, but the rest I could do now. I used some thin magnet wire going into the conduit, having to study the pictures very carefully for...
There is one unique detail that isn't shown on my Google pictures, except the concrete pad and a rusty rail (probably OSHA had something to do with it), but was in the photo set that was sent to me; and that is the car ramp. At first, I had no idea what it was. Once it hit home, I figured out from the photos how it was built, and started the head scratching process on how I was to build it.
Before I built the ramp, I had to build up the pad to support it, essentially a square piece of plaster I poured in a basswood form, and fixed in over a block of wood, and the surrounding area filled in with the scenery with a curved road leading up to the road out front. I used a section of brick material from Rusty Stumps for a foundation wall to support all that and have some room to access the garage below.

For the ramp, I settled on using styrene. I used some 'I' beams, cutting off one section for a 'T' shape (sort of an combination overlay of a T and L). The cut off section was left rough to represent the welded area of the prototype beams. I glued on the associated end pieces to prevent cars from running off the ends, cut them to length (about 2.75"), and cut some supports from square styrene. I then proceeded to weather them, heavily. They were first painted black using Vallejo paints; this paint sticks to styrene easily using a brush, then left to dry. Then using various dark rust colored powders from Dr. Ben's, I completely cover them in rust, dabbing in the powder rather than painting or rubbing it on. Next I did the back rail which would have prevented people from going over the edge. Using the photos as a guide, I used some 1/32" styrene angle to build up the rail structure in one piece, then, after it all set, I painted and weathered the rails as I did the ramps. Various details were added under the ramp, a bench with tools, scratchbuilt step ladder, acetylene tanks, trash, tires and oil cans with an appropriate amount of spilled oil, and some wrenches by Vector Cut thrown around to complete the scene.

The rear of the building in Pittsburgh didn't have much more than brush behind it, as it went steeply down towards a house with a lot of trees in between. On my model, I took it upon myself to change that, and instead I made a flat area for some additional detail. Apart from various castings, car details from Vector Cut, and a JL Innovative motorcycle, I added a shed. I had built an extra shed for the Sierra West Models Loco and Service Shop kit, and decided it would also look good at the rear of the garage. So there it is, with a chained and locked door an' all. I added a Woodland Scenics tow truck out back, and a few trees; more will be added when it's placed on a layout.

When I added the awning, I deviated from the colors in the kit instructions. The prototype looks like the top of the awning was red, where the kit said to paint it green with red on the base of the awning, or between the stripes. If the real one was red, it had faded out long ago, and the building now shows more a grey color. So, I painted it red and came back with a light grey then added some light grey pan pastels. This left a slight hint of faded red and gave it the look I wanted and does not over power the model, in fact, it blends in nicely. I painted the sides of the awning in a striped red and green, and muted those colors with some grey pastels. The oil can rack out front was scratchbuilt of brass, and some painted styrene cans.

I don't build many kits, but this one was one of the most enjoyable and rewarding of them all. I met a few friends over the Internet, overcame a few challenges, and literally had a good time building it.

If you think my skills can help you build better models please contact me at adm.nelson@cox.net

David S. Barnkow

David is another skilled modeler I am pleased to introduce. He will be an excellent source of help to model builders who want to improve their building skills, or diversify their building projects. My name is David Barnkow, and I have loved trains since my first memories. I began active modeling during my sophomore year in college when a friend introduced me to Model Railroader magazine. I spent the next ten years bouncing between active and armchair modeling, and ravenously reading anything about model and prototype railroading I could get my
hands on. I am not a talented artist, I learn very slowly by trial and error, with the emphasis on error.

In 1986, I joined the MoKan RailJoiner HO modular club in Kansas City. It was here that I met the first of many dear friends as enthusiastic about trains as I was. Included in this group was Ron Morse, MMR, the person I consider to be my first mentor. Ron's work was extraordinary for his scratch building resourcefulness, his intense attention to detail, and the prodigious volume of his work within the small space of his 6-foot long Forks Creek Module.

My second great influence came from the pages of *Model Railroader* in the article featuring Lorell Joiner and his O Scale Great Southern Railroad. Lorell first introduced me to hand-laid rail. He too demonstrated extraordinary attention to detail and a prodigious volume of work, but this time on a grand scale of several thousand square feet dedicated out-building.

Another great mentor in the hobby of model railroading was my friend and fellow member of the Colorado RailLink HO modular club, Mr George Stenko. George showed me the power and reward of camaraderie in the hobby. His boundless interest in the projects of his fellow modelers, and his non-judgmental acceptance of modelers cut from any fabric demonstrated for me the deep and lasting human connections we can make through this hobby.

I have at one time or another modeled in G gauge, O Scale, S Scale, HO Scale, and N Scale. I have been most interested for the past decade or so in On30 modeling. I have recently created a hybrid scale/gauge, called On48, as a standard-gauge companion for my On30 to permit three-rail dual-gauge modeling. I believe my modeling style is best described as impressionistic. Like the great impressionist painters of 19th Century France, I have tried to put together just enough detail and structure within my modeling so as to permit the viewer to fill in the spaces from his or her own experiences. While my techniques are crude and the fidelity of my creations are limited, I believe I can create a rich and fertile canvass for my viewers own imagination.

www.nationalgallery.org.uk/paintings/claude-monet-the-gare-st-lazare

The O Scale Resource November/December 2018 30
I appreciate the marvelous detail and variety the modern hobby manufacturers provide for all of us. But my interest is in making the project myself. I hold a deep reverence for the “popsicle stick and tin foil” modelers of the past. I have no particular gift or skill in model railroading other than I'm not afraid to try, fail, and try again. I can not offer any unique insights about model railroading. I can, however, listen to and appreciate anybody with a model railroading idea.

I invite you to see my modeling at any of the links below.

www.youtube.com/user/dbarnkow/
www.facebook.com/ClearCreekCanyonOn30/
If you believe I can help you in your modeling please contact me at David.Barnkow@oscaleresource.com

Paul Chapman

I am really impressed with Paul, his trial and error experience, and his obvious dedication to building his model railroad. I think you will also be impressed.

My first memory of a train set was my Dad’s 8’ x 4’ Hornby layout erected in the garage. Full of set track points and short straights, the scenery was made up of the over the counter buildings, figures and animals with the backdrop of green painted fields and black painted angular roads invariably laid out in a rectangular loop in the centre of the board. I’m told that all of this was created for me and my twin brother to enjoy, but at an early age it was the inner child of my dad who scooped all the enjoyment. Following a road accident that left him hospitalised, the layout was dismantled and would only occasionally reappear when the notion took us to play trains rather than Lego or cars.

Throughout my childhood years, I dabbled in building kits primarily from the Tamiya WW2 range or Airfix and Revell aircraft. In my mid to late teens, I reacquainted myself briefly with model railways with the view of constructing a diorama approximately 2’ x 1’ detailing a station with townscape behind. This project never got beyond the framework, but that frame followed me from house to house through my twenties as University, work and family life took over. Eventually it was disposed of, the thinking being those modelling years were a thing of the past.

Fast forward to my late 30’s, a Christmas gift of a Hornby train set re-ignited a long lost passion. Firmly settled in a home and marriage, now seemed the right time to move back in to the hobby. The big difference between now and then was the plethora of manufacturers supplying all manner accessories, locomotives, rolling stock and scenic materials for the railway modeller. The other huge difference was the Internet. Rather than just relying on what the local toy or model shop could provide you in kits, the Internet opened doors to a range hitherto unknown. Over and above this came a wave of information from other modellers previously only accessible in snippets through the print of railway publications.

It’s this information that I feasted on for months, absorbing the detail of exquisite layouts, making decisions on the modelling scale I would embark on and understanding the products available to the modeller to produce more realistic models and scenes. YouTube was a valuable resource to just watch trains running on layouts, but it was the online modelling forums that formed the foundation of learning, and in particular, New Railway Modellers. Here, a group of modellers offered advice, demonstrated their own creations, wrote blogs on their railway developments, highlighted pitfalls they’d encountered and, most importantly of all, encouraged the new modeller.

If I was to be asked who mentored me I couldn't give one name, but I can point to this forum as my inspiration, my mentors, if you like. Most come under forum pseudonyms, Emmetman - the track plan guru; Geoff T - a man with decades of model making experience and all to willing to pass on advice; Ex-Pat, Jim SW,
Railwayjim - extraordinarily competent scratch builders to name but a few (but not to alienate others not mentioned) all have helped to make me the modeller I am today in their own way.

With this guidance and knowledge I embarked on my ambitious plan to erect a layout in the loft. I model in OO Gauge. For the UK modeller it really comes down to a choice between OO and N gauge. Space permitting, OO tends to be the norm although those with similar space may opt for N to allow for more prototypical length trains. I opted for OO, probably partly due to the memories of that first garage layout I remember as a child.

Needless to say, I learnt a lot in that first 18 months of the build, to the point where I scrapped the lot and started again. Some of this was down to poor workmanship on my part laying the track, some down to the budget approach of buying second hand points, but mainly due to not really having a clear idea of what I wanted. The forums proved invaluable again for advice and guidance. In the end, I started looking closer to home. An author would tell you to write what you know, perhaps the modelling equivalent is to model what you know.

Northern Ireland is bereft of a large railway network, but it does have a history. My local town boasted three stations at one time, and like many they portrayed the wealth that the railways once flaunted in their architecture. With that in mind, I turned my attention to researching the local railway history with the view of modelling the station in its original grandeur which brings us to the present day. Research continues, but modelling has begun on some of that location.

When working on my first layout, I developed an interest in scratch building the scenery that would encompass the layout. The Wills Craftsman series was my introduction in to this field. Primarily a kit with its own detailed instructions, these kits still require the modeller to take a rectangular piece of embossed plastic and cut, shape and detail the product to make a building. The station proved challenging but informative and so the bug was caught.

Since then, all buildings for the layout, bridges and other scenic detailing have been produced using card, embossed plastic brick, plastruct materials and paints. In my mind, you can capture the essence of a prototypical building only by scratch building it. No kit comes close. The scratch built structure also has the benefit of fitting exactly in to the location you have for it and therefore looks much more natural and pleasing to the eye.

The Internet again has been my mentor in this process. The wealth of information on materials available and methods of construction are all a help. The forums, too, with encouragement and helpful suggestions have also aided my learning of the craft. So too has trial and error. Sometimes there just isn’t an answer and perseverance is needed. Looking at the model from a new angle, taking time out to think things through. There is an answer somewhere, it’s just a matter of finding it. With each build comes new experiences and new knowledge and a desire to try something different. This happened when building a bridge for the layout. I wanted to add ‘jack arches’ to the underneath. No one was going to be able to see it, but I knew they were there and to me that’s all that mattered. I just wanted to step it up a level and aim for something a little bit different.

Until Jim Kellow contacted me regarding this mentoring, I can honestly say I hadn’t considered it as a tool in my modelling. Looking back now, I can see that all that information gleaned from those online friends in its own way has been my mentoring. Can I mentor others? I guess I probably can, but again I just hadn’t considered it before. I’m not going to be much use to the modeller wanting help with wiring or the prototypical look of a railway line, but when it comes to scratch building structures, I believe I can show the modeller that the craft is not that alien and can be competently completed by anyone.

My journey on the model railway scene has been short, really only the last 5 years, but I’ve learnt a lot and continue to do so. I use the forums and YouTube to document my work and will always try to answer any questions that arise from that. If a viewer is able to glean something from any of my work and be inspired to try something similar or to have a go at a technique I employ then perhaps that is the biggest compliment of all.
This row of low relief buildings was my first attempts at scratch building. The terraced houses were followed by the corner pub and then the office type building. Each was modelled on actual buildings in and around the area I live. (Image 1)

Jack arches were my main goal when producing this bridge. Originally built for the first layout as a road over bridge, it has been utilised again, but this time with the track over the road. (Image 2)

Dioramas can be a clever way of testing new techniques before applying them to the actual layout. In this scene, I wanted to experiment with water, creating embankments and bridging those crossings; all aspects that would be incorporated in to the actual layout. (Image 3)

My biggest scratch build challenge to date. This cabin is the actual one still standing at my local station. The only aspect not scratch built were the window frames, although I did try. Sometimes you have to concede defeat and go proprietary. (Image 4 next page)
Occasionally I step away from the building work and take on a wagon. This old Airfix wagon is quite crude and simple, but with the addition of some wire handrails and a weathered finish the results can be quite good. (Image 5)

All photos by the author. You can follow progress of my layout by searching for Galgorm Hall on YouTube. Or contact me at Paul.Chapman@oscaleresource.com if you believe I can help your model building.

Well, we come to the end of this “New Tracks” article. I hope you have enjoyed it and found some new confidence and inspiration for your own model building. Thanks for reading this far. Time for me to go back to my work bench.

Get Real Productions

O Scale model building services by Jeb Kriigel
Custom high quality railroad buildings

Kithashing
Scratchbuilding
Craftsman kit building
Custom painting
Realistic weathering
Super detailing
Quick turnaround with progress updates
Commissioned & freelance work
Creative, Imaginative, and Realistic
Specializing in unique & one-of-a-kind creations
All work guaranteed by a Model Railroad Craftsman

"We photograph what we build!"

Call or write for a free quote:
Get Real Productions
11 Out of Bounds Road
Palmyra, VA 22963
Voice: 434-589-2660
Fax: 434-589-4898
kjkriigel@aol.com
**New** Kit 335B
Floor Model Drill Press
Second in a Series of Vintage Machine Tools

Independent or Overhead Belt Operation. 17 Pewter Castings
Drawing and Instructions

Price $28.00 Made in USA
www.crowriverproducts.com

---

**PAY PAL**

---

**DRY TRANSFER LETTERING**

Over 2000 Dry Transfer Lettering Sets for all Periods and Scales
- Cars - Locomotives - Meat Reefer
- Gondolas - Billboard Box Cars & Reefer
- Hopper Cars - Car Names - Alphabets
- Stripes - Chalk Marks

**SCRATCH BUILDING SUPPLIES**

- PC & Wood Ties - Barrels - Plastics
- Screen - Blackened Cable & Chain - Poles
- Window Glass - Eye Bolts & Rings
- Hand Tools - Straight & Coiled Wire
- Black Nylon Filament - Model Makers Pins
- NMRA Standards Gauges - Sheet Metal

Shop Online - cloverhouse.com
Or Order Catalog #14 - $6.00

---

**CLOVER HOUSE**

Box 216D, Verdale, WA 98037-0216

---

**RIGHT-O’-WAY**

'O' Scale First with Accurately Scaled Rail Since 1963
Now Producing Red Cliff Miniatures & American Switch & Signal

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

2286 Hampton Way
Clovis, CA 93611
559.297.0505
Jay@right-o-way.us
http://right-o-way.us

---

**DESPLEINES HOBBIES**

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

3-½ Miles north of O'Hare airport on Lee St.
1524 Lee St., Des Plaines, IL, 60018
Ph. 847-297-2118 Open Week Ends
www.desplaineshobbies.com

---

**1934 Service Truck**
Berkshire Valley Models

Highly detailed white metal & laser cut wood kit.
Detail parts & decals included.
#207 – 1934 Service Truck - O scale (1/48) $34.95
www.berkshirevalleymodels.com

---

**MODEL 22 RACOR SWITCHSTAND**
WITH ADLAKE LANTERN

All Brass, Lighted and Manually Operated
First Time Ever Produced in O Scale
$24.95 EA - All Aboard Trains
ALL-ABOARD-TRAINS.COM
Another Indy show has come and gone. Great memories, friends and deals. This year we tried something different. We used presenters demonstrating at tables throughout both halls in place of formal clinics. This really worked well as people could come by and sit, watch and ask questions in a non formal environment.

Join us as we take a look back at this year’s show.

Lee Marsh from Lee Marsh Model Company was phoning home when I caught up with him.

Below are the sample models from Erik Stott and Midwestern Model Works
Glenn Guerra was one of the presenters this year. Working on an RS1 brass model (S scale), he demonstrated soldering with different solders and equipment.
Above: another look at all the equipment that Glenn used for his demonstrations.

Below: Arry Dodd (blue shirt) talks with presenter Tom Lennon about kit building.
Above: Presenter Ken Zieska spent the show working on and answering questions on kit building. Below: Presenter Bryan Vianco from Streamlined Backshop was demonstrating DCC programming using three different types of programmers.
Many people wanted to know how to paint figures. Presenter Marty Vaughn spent both days showing his craft and going over the materials he used for painting. I made sure Amy sat in so she can start painting my figures.
Amy welcomes Rodney Perkins (l) and Kevin Freeman from Australia to the show. With Australia well represented, and Arry Dodd (below) from the UK, it gave the show a nice International flavor. Arry was talking with Marty Milner, Jr. from Scale City Designs.
Larry and Angie Stanley from All Aboard Trains were showing their newest switch stands. (Sorry Jeff Lang, I bought all the Hi-Level stands they brought with them.) Below: Merlyn Lauber from Caboose Stop Hobbies talks with customers.
If you wanted figures, Allen Pollock from Fun & Games had them.

Below: Marty Vaughn paints figures as Allen Pollock talks with Lee Marsh.
Ted Schnepf from Rails Unlimited showing his O Scale Hall of Fame award.

You can’t have a show without the great Bill Davis from American Scale Models.

Kathy and Tom Dempsey from Clover House making a sale.

Next page (top right): It’s always a good show when Marty Milner, Jr. & Marty Milner, Sr. Show with their Scale City Designs line. Carey Williams (top left) brought his display of historic O scale models.

There were people and models, what else could you ask for?
American Scale Models had a large display of new and used equipment on hand.

Below: My good friend, Brian Huang, shows his Independence Junction layout. One of these days, he’ll do a write up for us.
We want to thank Kimberly Ryker and Jim Canter for the beautiful cake they presented Amy and myself.

As many of you are aware, it’s been a rough year with Amy’s cancer, but the good news is treatments are finished, her hair is back and she feels better than ever!

Click above for more images from this years Indy Show.
Welcome to my switching layout. As the title suggests this is my second “O” scale exhibition switching layout.

The background
A trip to the York (UK) show at Easter, 2017 and a chance of operating a small simple “HO” pointless layout. While the owner took a break, it gave me the idea to upscale a similar track plan (with the owner’s permission).

Now I like good size layouts, and my previous layout “Western avenue”, (see O Scale Trains #77 Jan/Feb 2015), had grown from 12ft to a total length of 22.5ft. This was far too big to fit in the car.

I wanted to replace it with one I could manage on my own, including lifting, erecting and dismantling, and it had to fit the car along with all stock and bits etc.

So the spark was lit, a small “O” scale layout, that would fit in my car, along with stock, locomotives and the dog, and our small caravan attached behind would be
rather handy. That would get me and my layout to a show or two, and the good wife gets a break away from home, so everyone is happy.

**Structure materials**
I was lucky enough to obtain some pre used timber, in the form of softwood rough cut 2” x 1” along with a couple of ¼” thick plywood sheets 8ft x 4ft. So, 3 base boards 3ft 3” x 20”, (1m x 0.5m) plus small extension for pivot point on the “sector plate”.

**Construction**
Pretty basic really. First the plywood was ripped into strips 100mm (4”) wide and cut to length for the sides and ends, with blocks of 2” x 1” and 4” x 1” long softwood, along with 2” x 1” x 3’ legs.

The collection of parts were then assembled and glued and screwed at intervals along the long side with full width blocks at the ends. The top is 6mm ply cut to fit and glued and screwed as before. ½” wood dowels align each board and metal clips hold it all together. The first board is fitted with 4 self contained folding legs with the other 2 boards having 1 set each which piggy back style on to each other.

It was all coated with clear varnish to seal it from the Scottish weather.

**Time for track laying**
I had a bundle of code 124 Peco nickel silver track sitting on my outside work bench. The track is laid directly on the plywood and held in place with the ballasting, which is made up of whatever comes to hand – might be left over ballasting stone, dried soil, sand and dried and sifted grit – all glued down with the tried and tested, diluted white glue method.

Tracks across board joints are soldered to brass screws and all the tracks are connected to a simple 2 cable “bus” underneath with droppers on each section of track and 2 pin connectors between boards.

**Scenic**
A few boards with a bit of track does not make an exhibition layout! So in keeping with the pre-used ethos, nearly all the buildings and features are from the “Western Avenue” layout, although somewhat altered or given a new identity. Here’s a few examples:

The road bridge from Western Avenue, (built by my friend Tony Curtis) would not quite fit, so I removed the bridge supports and have reused these under a new roadway.

“A.P. Onga” had a boxcar converted into a storage shed. His business has done so well that he has moved into the old “Pringel & Purina” building.

I have added an extra 18” to the right hand end of the layout, this was to extend the staging track and also to give me an excuse to use a “Diner” I have owned for about 12 years with no place to put it.

**Track plan and control**
As you would have read earlier, “Pointless”.

4 tracks to service the “team track” platform and the local businesses, with a fifth (4th from the front) track entering from the hidden road (transfer yard) and hidden destinations. To keep the layout short, a “sector” plate allows access to each road. This is long enough to hold 1 x SW type locomotive plus 2 x 40ft and 1 x 60ft cars or any combination.

DCC operation via NCE Procab.
The Railway company

The tracks are owned by “The Lyttelton & Western Railway” (L&W). A short line with a mixed bag of locomotives. Even in this time, 1960s – mid 70s, steam is in evidence in the form of an ex Indiana Harbour Belt 0-8-0 and an ex C&NW 0-6-0 (still a C&NW number). Rumours abound that a relic in the form of an ex B&O 0-4-0 is being re-boilered in the workshops.

Diesels on roster are - 
(CGW) NW2, (C&NW) SW8, 
(L&W) SW9, (L&W) GE44t and a 
(L&W) Plymouth25t.

Operation

As an example of operation, a normal train would consist of a minimum of 4 or 5 cars.

Using logical sequences, great fun can be had manipulating the order of spotting and collecting to imitate a real life or imaginary – running schedule.

Of course, longer trains can arrive, with visiting engineers so a bit of pre thinking is required.

If the train is longer than
the sector plate, then cars are dropped on the approach. The sector plate is then moved to an appropriate track, and cars spotted or held until cars to be removed are moved to make space.

**In conclusion**

This has been a fun and rapid build.

From an idea to its first showing was a little over 2 months. The layout has been on show at several exhibitions so far and is booked for 3 more this year (2018) and the diary for next year is already filling!

Whilst this is fun, I still want to build a replacement for Western Avenue, I am reminded by many of my old operating crew that it should never have been recycled so soon.

So, if you see the layout at the show you may be visiting, just ask for a “shot” (Scots for have a go!!).

*View under the road bridge, looking towards “A. P. Onga” (l/h track), “Harry Samuels” (centre track) and Team track platform on the right.*

Below: Waiting for the taxi. View hiding the short extension to staging track.
Above: Collecting liquid waste from the fertilizer plant. Phew, what’s that smell!

Below: Oil delivery to “Harry Samuels” fuel services.
Above: View from the staging yard. Empty Gon has just delivered coal to the merchants.

Below: C&NW 319. Parked up under the road bridge, sheltering from a hot sunny day.
Above: 319 about to collect empties.
Below: Chemical delivery to “A. P. Onga”.
Tommy Little’s Model Railroading is a direct result of his twenty-five year career with the Rock Island and as a Roadmaster for the BN. Along with his railroading career, John Russell and Ken Burney have been instrumental in inspiring him.

He has been modeling for about sixteen years now, and with the help of Mickey Seligman, a hobby shop owner, decided on O scale.

As with many model railroaders, Tommy’s idea for his layout is a direct result of utilizing his available space in the basement. That, combined with his years of railroad experience, helped to form what is now his prototypical Rock Island - Arkansas Division. Located in Little Rock, Arkansas on the Rock Island, the layout time frame ends in November 1967. Be sure to review the diagram that Tommy provided for this article.

The layout uses hard shell scenery, and is operated with TMCC. TMCC is Tommy’s favorite part of the layout because of its ease of operation. As for track, 50% of the track is flex track, Code 125 on the main line. The remainder of the track is hand laid, with the yard track being Code 100, about 50/50 hand laid and flex track. All switches were scratch built by Tommy. Tommy also painted all the locomotives and cabooses.

When asked what he enjoys most about the hobby, Tommy told us it is making and running trains. The Rock Island - Arkansas Division is all about running trains, and is based on the one person concept that John Russell uses. It is based on a 24-hour day, and could take a week to complete. There are 3 shifts on the railroad:

- **Midnight Shift** - This shift makes up and runs # 25 and # 26 freight trains.
- **Day Shift** - This shift makes up the Stuttgart local, Hot Springs local and Bigelow turn. In the middle of these trains is the passenger train, # 21.
- **Evening Shift** - This shift works all the Little Rock industries and rip track switching.

*Note:* Once the trains are built, they leave the yard and go into staging in the adjacent room.

So, sit back and enjoy this tour of the Rock Island - Arkansas Division. Thanks Tommy for sharing your layout with us.
Above: Details behind the engine house

Below: Train #25 leaving town alongside warehouse row
Rock Island Motor Freight in downtown little Rock

Thompson’s Feed Company showing beautiful wire line details.
U25 #229 leaving town approach depot.

This is my most recent engine work. It’s a Lionel ALCO S2 converted to two rail.
Warehouse workmen also showing more of the great power poles and wire work.
Looking westward down the west lead.
Above: Train #25 alongside the bluff near Bigelow.

Left: Small photo showing the staging track before scenery.

UPDATE: The staging yard tracks are complete, as well as their scenery. It is now referred to as Russell Yard.
Train #26 along the bluff with bridges in background.

Train #26 going past men at the elevator.
Above: Tavern row if you need a drink.

Below: Engine #739, Bigelow turn with train leaving Biddle for Bigelow.
Above: Transfer caboose #19081 being used for the Bigelow turn.

Below: Engine #677 F7, which has a steam generator, is pulling a passenger train at Bigelow while meeting a freight on the bridge.
Above: VO1000 that I built and painted for a friend.

Below: SW8 that I painted for myself works Biddle yard.
Engine 406 is an FP7 made by me by using two P&D bodies together.

Below: Scale house track looking westward.
Above: Engine #492 an RS3 that I built and painted for a friend.

Below: Engine #406 is an FP7, passing through Biddle yard with its train.
Merry Christmas a
Happy Holidays
Depressed-Center Flatcar

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

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

#19209 $ 79.95

B.T.S. Better Than Scratch! 1782 Trinity Rd Belington, WV 26250
304-823-3729 www.btsrr.com

$5.00 S&H in the US

-- End of Document --
I am continuing my series of articles on building my first two steam locomotive kits, and this is part three. The kits were for a New York Central class B-11 0-6-0 switch engine. These locomotives were built starting in 1916 and at that time the Nickel Plate railroad was still controlled by the New York Central. The Nickel Plate got very similar engines. As I discussed in part one, similar and exact are not the same. Before I go much farther here let me expound on my thoughts regarding similar and same a little more.

This model project had me thinking a lot more about how locomotives were built. If you look at the diagram sheets of the New York Central and Nickel Plate locomotives, they look identical. The diagram sheets don’t have a lot of detail on them, and that is where the differences are. The locomotive builders were primarily building the boiler, frames, drivers, valve gear, cabs and tenders. Almost all of the appliances were purchased from a separate manufacturer to the locomotive purchaser’s specifications. I suspect that even cylinders could have been purchased from a third party. Making a cylinder pattern for casting is an involved process and therefore expensive. I have no proof, but I suspect that the same cylinder patterns were used on many different locomotives. It would have been too expensive to make different patterns for only a few locomotives.

These are the air tanks I needed to make. Notice the brackets under the running board. I was rather surprised there was no saddle for the tank to fit in.

By Glenn Guerra
This diagram, from a Nickel Plate diagram book, is of the locomotives I wanted to make models of. These were locomotives 60 through 69 and were built in 1917 by Lima. Locomotives 50 through 59 were built by Brooks in 1916. There was a third group, numbers 70 through 79, built by Lima in 1918.

This is a diagram of the New York Central locomotives. Notice how close the basic dimensions are. This is a lot like buying an automobile. The basic automobile is the same, but yours may have electric windows or some other options that change the price slightly. I suspect this was going on with locomotive purchases, but have know way of knowing for sure.
When I discuss this with friends, their counter point is the specks on the diagram sheets show the locomotives are different. However, a difference in piston diameter or stroke does not mean the basic casting is different. The cylinders have a sleeve in them so all the ports can be machined in the right locations. The bore of the sleeve or the stroke travel is relatively easy to change. So by changing a relatively easy part to make, the locomotive builder can make a cylinder to match your specifications and not have to make all new cylinder patterns for casting. One last point on this subject is the New York Central locomotives were made by Alco at the Schenectady, New York works, and the first order of Nickel Plate locomotives were made at the Alco Brooks works. The next two Nickel Plate orders were made by Lima Locomotive Works, yet the cylinders look the same. There are three possible explanations for this. The first is the railroad company paid for the patterns and therefore had control of their use. The second possibility is the railroad purchased the cylinders from a third party and had the raw castings delivered to the locomotive builder. The third possibility is the railroad purchased the cylinders from Alco and had them sent to Lima to save having to make new patterns. Unless you study the financial records of all parties involved there is no way of conclusively answering this, but it does show there is a lot more to how these locomotives were ordered and built than we know. By now, you are also wondering how this has anything to do with the air tanks.

For all we know, the Nickel Plate was instructed by the New York Central to purchase similar locomotives to keep the cost down. When you start to look at the appliances, on a locomotive that is a different story. They were mostly purchased from a third party and the locomotive builder just installed them. There are a lot of possible reasons for the differences of appliances. If you remember, in part two of this series, I made the boiler check valves because the Nickel Plate used a different style than the New York Central. There are parts of a locomotive that are not as difficult and expensive to make as we can see in the cylinders. For whatever reason, the Nickel Plate used a different model of a check valve than the New York Central. Since the New York Central used a horizontal style of check valve, the delivery pipe ran on top of the running board. The Nickel Plate used a different style check valve that had the delivery pipe under the running board. As a result of this, the New York Central was able to use a short fat air tank. The Nickel Plate had to use a smaller diameter tank since the water delivery line had to run behind it. To get the volume of air tank, they had to make the air tank longer. Fairly simple changes to the basic locomotive that do not add a lot of expense, but do change the appearance of the locomotive. What this all means to me is I need to make new air tanks and brackets for my Nickel Plate switchers. Now, we will get to how I did it.

I planned to use brass tubing with brass ends I made on the lathe. One of the concerns was how to locate the brass ends in the tube while I soldered them in. This was solved by using telescopic tubing. The inner tube was cut to a shorter length and when the ends were put in they seated on the shorter inner tube. Another concern was how to make the rivets. I thought about embossing them, but ruled that out. I had no tool that would reach in the tube to emboss the rivet. The other possibility was to drill holes in the tube and insert wire in them. After soldering the wires they would be trimmed to length. The trick here would be to space the holes right. A year ago, I purchased a Sherline mill and some accessories. One of the accessories was a rotary chuck. This would work and would give me good control of the spacing. I think the real message here is to think your project through and come up with a plan that is possible with the tools you have.

These are the parts before I started soldering them.
Now that I had some idea of how I was going to make the tanks, I started thinking about how to assemble them. I decided to put the pins in first and then solder the ends in. Since the pins would need to be trimmed on the outside and the inside, I would need to put them in first and then trim them. It would not be possible to trim the pins on the inside with the ends in. The other possibility would be to solder the ends in first, but that would mean I had to position the pins exactly when soldering them in to avoid trimming them on the inside. This seemed like a lot of trouble, and I could not think of a good way of holding the pins in place while soldering them. The next consideration was how to solder them.

To make these tanks I would need to solder the pins in and then solder the ends in. The ends were going to be a rather heavy piece of turned brass. This would mean there would be a lot of heat required for the soldering. I could see all my little pins coming loose and moving around. It was not a pleasant thought. My solution was to solder the pins in with 1200 deg. silver solder. This would not come loose when I used a lower melting solder on the ends. For the mounting brackets under the running boards, I thought I would try to machine them rather than fabricate them. If I fabricated them, I would have the problems of locating small parts and having them stay put while I soldered the brackets to the boiler. By now I had a general plan that seemed like it would work. The next step was to start making parts. The photos and captions that follow will describe the steps.

This is the set up I used to drill the holes in the tubing for the rivets. The rotary chuck from my Sherline mill was mounted like this on the drill press table. Since the chuck has marks on it for degrees of rotation, it can be used as a dividing head. I decided to drill a hole every 10 degrees. When I clamped the chuck mount to the drill press table, I set it up so the center line of the tube would be where the drill would drill. At that point, all I needed to do was set the tube in the chuck to the correct depth in the chuck. The next step was to cut the tubing all to length. I did that in the lathe, but you could do it with a saw. Doing it with the saw will require some care to get the ends square. The next step was to use the scribing compass and scratch a line where the rivets would go. Then, I put the tube in the chuck so the drill would drill on the scratched line. After I set the chuck to 0 degree angle, I started drilling. My drill press chuck would not hold the #78 drill so I used a pin vise in the drill press as shown. It is always a good idea to drill a pilot hole with a centering drill, but I was able to get by without that here. Chuck up the drill so only a little is sticking out of the chuck. Then, gently start it so it will find its center. After you drill the first hole crank, the rotary chuck 10 degrees and drill the next hole.
After I had the .016” holes drilled in the tubing I cut short pieces of .015” wire and put them in the holes. I held the tube in the small bench vise. I wanted to use high temperature silver solder here so the pins would not come loose with subsequent soldering operations. In the past, I cut very small pieces of silver solder and put them in place. For these models I purchased some silver solder paste from SRA Soldering https://www.sra-solder.com. I have been buying soldering materials from them for a while, and thought I would try the silver solder paste. It worked great. From the photo here, all I did was heat this with a propane torch until the solder melted. The flux will melt first and then the solder will get shiny. At that point, it is melted and you are done. The silver solder will flow into all the joints.

After the pins were soldered in, I needed a way of trimming them to length. I was able to cut them off with a side cutters first. That left an equal amount showing. I filed the first one by hand, but was not very happy with the results and time it took. The next thing I tried was to put the tube in the lathe and trim them off. This sounded like a great idea, but turned out not to be. The problem is the heat required for the silver solder is around 1200 degrees F and the brass will anneal around 800 degrees F. I had annealed all the brass, and made it dead soft. As soon as the lathe tool hit the pins they, were bent over and did not cut. I went back to doing them with a file, but how was I going to get them all the same length? My solutions was to wrap some .010” brass around the tube as shown and file until I hit the brass wrapper. This would prevent the file from cutting to much off the pin. It worked quite well.
Look close at the previous photo, and you will notice the heads of the rivets are flat. They need to be softened up a bit. I did that with a wire brush in the motor tool. Then, I put the tube in the battery drill and ran it slow while running the rotary tool on the pins. It rounded the pins off nicely. I used the rotary tool with a carbide burr to remove the excess pins on the inside. Go easy with the carbide burr. They tend to grab on an inside cut like this.

After I had the pins in the tubing, it was time to make the ends. I ground a lathe tool with an angle and hollow on it as shown, then ran it into the end of a brass rod. This was a simple grind to make and got me close. It gave me the large radius of the tank end and the bung for the pipe to thread into.
After I had the large radius on the end cut, I finished it with a file to make the small radius. This was much simpler than grinding a tool to do this in one cut. I turned the outside diameter to fit the tube, and cut the ends off the rod. When you cut the ends off the rod, make sure they are all the same. Drill the wire hole in the bung at this time, it’s much easier now than doing it later.

The tank on the left is done. The idea was to put the short tube inside the long one so it became a stop for the ends. In order to get the ends and short tube into the large tube, I needed to grind the pins flush on the inside. On the real tank, the rivets had heads on the inside, but I have not yet figured out a good way of doing that. This will have to do for now.
The next step was to make the tank brackets that go under the running boards. I did not want to fabricate these because I needed eight of them. In addition to the quantity, I could not figure out a simple way of holding a bunch of small parts while I soldered them together. The next problem was to keep them together while I soldered them to the model. Since I now had a milling machine, I decided to make them. The general process is to make what my machinist friends call a “loaf of baloney”. You machine a shape that you can then cut pieces off of like slicing baloney. This is the first step and you will see how this works in the following photos. I like my Serline mill, but I have trouble holding things square, even with parallels. I solved the problem by taking a small cut on some wood like this first. Now I have a true flat surface to work from. I also have found that I can glue the metal to the flat wood with ACC glue. This will work as long as you take light slow cuts. This photo is what the “loaf of baloney” looked like when it was done.

This was the next step in making the brackets. I turned the wood block on end and used a slotting saw. This is the slicing off the “baloney” part. The idea here is to use the slotting saw to cut the groove in the part and to cut them off. One of the shortcomings of these small milling machines is they adjust the Z axis by moving the head up and down, not the the table. As you move the head down to take a cut you take the slack out of the adjusting lead screw. Now you have slop in the adjustment which causes the head can go down farther. To compensate for this, start your cutting at the bottom, and adjust the head up so there is no slack in the adjusting lead screw. Notice my sketch in the background. Always make a sketch before you begin.
When all the machine work is done, pry the brass parts off the wood. Some of the wood will come with the brass. Drop the brass parts in some acetone for a while to dissolve the ACC glue. I have found this to be a good way to hold small parts for milling. You can also start to see the parts take shape.

This photo is a good illustration of how the brackets were finished. The two on the left are as they came off the wood and out of the acetone. The next step was to drill a #74 hole for a mounting pin as in the third part from the left. The fourth part has the corners rounded with a fine file. The tab on the part needed to be bent down to solder to the boiler. If I tried to bend this part, it would have broken off because the brass was hard. The remedy is to anneal the brass. To do this, hold the part in some old pliers and heat it with a propane torch. You want to get the part red hot. Let it cool, and the brass will be dead soft. The fifth part from the left has been annealed. The last step was to bend the tab so it would fit the boiler as shown on the right. The brackets are now ready to solder to the boiler.
In this photo, I have the brackets soldered to the running boards and boiler. I used a 96% Tin 4% Silver solder for this. This solder is commonly called lead free solder and is sold in any hardware store for soldering plumbing in your house. It melts at around 450 degrees F, and is stronger than Tin Lead solder. I was happy with the added strength to the running boards. The mounting tabs should not show and should be under the boiler lagging, but I felt that was not necessary here. It would have been difficult to make a mounting hole in the boiler, and the tabs are behind the air tanks and do not show.

This is one of the air tanks installed. I made the bands out of .005” thick brass. After scratching a line on the brass, I cut a strip off with a scissors. The brass will curl when you do this. To straighten the brass, clamp one end solidly in a vise. Pull the other end with some pliers until you feel it give a little. That will make the brass straighter. I folded over one end around some .020” diameter wire. Then, I removed the wire and put it in my bracket with the brass band around it. I soldered the brass band closed on the end. Next, I threaded the brass band over a pin in the other side of the bracket and folded the brass band over. I gently cut the excess band off and finished the fold. I found a straight screw driver held behind the band gave me something to push against to close the band around the pin. I then soldered that end of the band closed. To make the solder joints, I used a Tin Lead solder because it melts at 350 degree F and would not affect the bracket joint. The tank is loose in the bracket. I did a similar thing when putting the air tanks on my nephew’s Alco RS 3 in the January/February 2016 issue of The O Scale Resource.
One small look at the shop. I like the small Sherline mill a lot and am getting better with it. The two big issues I have with it are control of the Z axis and the vise. The Z axis problem is part of this type of machine where the head moves and not the table. It can be helped a lot with a digital readout that is made for this machine, and I think I will get one. As for the vise, I need to spend some time and see where the problem is. I don’t think the vise bed is on the same plane as the table, but I have not checked yet. I may need to take a light cut on the vise so it is true to the table. Other than that, I would recommend this machine. It is a good, well made machine for the money, and you can do some good model work with it. The cheap drill press is a disappointment. The quill has too much slop in it, but for what it cost it will drill some holes.

Well, that is how I made the air tanks and mounted them. I know the rivets on the tanks should show on the inside, but I don’t know of a good way to do that yet. That is a detail that is not very noticeable when you look at the model as a whole, so this will do for now. In all of our modeling, we need to make some compromises and we learn as we go. I will think of something some day.

I like my Sherline mill and would recommend taking a look at one if you are interested. They make a lot of accessories for them, and there are many tools to go with them that are made by different companies. Look at a place called https://littlemachineshop.com. All machines have some drawbacks that are inherent in the design, and the Sherline mill is no exception. It is, however, a well made machine, and part of learning to operate a machine is working around the drawbacks.

In part four of this series, I will show the pilot beam and front coupler pocket. Until then, have fun making models.
EMD Blomberg Trucks
Fully sprung in brass.
Sold separately or with repower kits.
See our web site for details.

31280 Groesbeck Rd, Fraser, MI
Voice: 586-296-6116  Fax: 586-296-5642
Open Mon-Fri 10-6  Sat 10-4  Sun 12-5

www.pdhobbyshop.com

Scale Model Railroad Structures
Over 300 O Scale Kits Available
Visit our Website to review pictures
and other models in HO and O scale today!

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

"O" Scale Kings
An O scale organization
promoting 1:48 2-rail trains.
Join us at:
oscalekings.org

Mather Car Project: Reserve Now!
Four Stock Car Styles - Three Box Car Styles
High Quality Trucks Available - Two Rail "O" and Proto48
www.richyodermodels.com  PH 610-678-2834 (6:00 to 9:00 PM EST)

OLD TYME WOOD CRAFTSMAN KITS
STRAIGHT TIMBER TRESTLE
With Great Detail Parts

KIT #4019
$81.98
U.S.A. shipping $12.90

KIT #4014
$85.98
U.S.A. shipping $12.90

P.O. Box 700  Artesia, CA 90702

Millhouse River Studio
Turntables & Transfer Tables  Manual or Auto Indexing  2 or 3 Rail
Don’t Settle for Less, Own the Best!

Transfer Table Diamond Plate Deck & Riveted Cabs
Optional Upgrades

26" Standard Turntable Shown
www.millhousestudio.com
(716) 830-5267

The O Scale Resource November/December 2018 85
I have a confession… In all my years in model railroading I have never kitbashed anything. Well, I did take a large kit and make two buildings out of it, but that really does not count. Why you ask have I never tried this? Maybe the reason many have not, I was afraid of what I may get into or just afraid of the results. Also, there is a bit of planning needed, and I don’t do well with planning. "Damn the torpedoes, full speed ahead!” has been my motto, for better or worse. A few months ago, Korber Models ran a half price sale on some of their kits. The price was right, so I bought two of them not knowing what I would do when they arrived.

John’s Cutlery and The Mill Works were the two I selected. One was an older kit with painted brown resin while the other was white. I had built an older Korber roundhouse kit and two part epoxy worked well.

I decided to make a flat as I had a need for one on a small siding against the backdrop. I used two
walls, one with loading dock doors and one with just windows.

Figure 1 shows the two wall sections, and Figure 2 shows the epoxy joint along with the wood stiffeners. The older castings do have a slight warp. Even though this was going to be a flat, I wanted to have sides to give the illusion depth to the building. I cut about an inch off of the corresponding sides of each building. (Figures 3 and 4)

The ends were sanded square and epoxied to the walls. Figures 5, 6 and figure 7 show the completed section.
Next, I added styrene to the bottom wood stiffener and added some bracing. No, I was not drinking while doing this however one brace is a bit off the bubble. (Figure 8) The styrene was cut to the same depth of the sides to create a box like effect as I was going to add a backing to the whole building.

As said, I sometimes get ahead of myself and here I should have added the styrene to the top before the bracing, but live and learn. Figure 8 also shows the styrene backing. I needed this so I could light the building and have room for the LEDs and wiring. The styrene had another purpose and that was to hang the LEDs. More on that later.

Both buildings came with flat roofs and I wanted something more viable, so I measured and added angled wood uprights to brace the new angled roof I needed to build. (Figure 9)

Also shown in Figure 9 are the two roof sections cut from styrene, as well as the windows that came with the kits.
At this point it was time to paint the front and see if I could make this look like one continuous building.

I used the cheap acrylic paints. My thought process, such as it was, was to mask off the right side and try to make the left side match it. The nice thing about these acrylics is that you can wash it off and start over if need be or even layer on the paint. As you can see below, it took awhile to get this right. (Figures 10 and 11)

Once I was satisfied with the color, I used PanPastel® Artists’ Pastels for the final weathering and over sprayed with a matte finish. (Figure 12) I decided not go for distinct mortar lines as this building will be next to the freight yards. Over the years, the smoke and soot would have blended in with the brick. From my stash of old Floquil paint, I sprayed the windows a dark green and the roof a tar paper black.
The two roof pieces were styrene covered with medical tape (3M Micropore) for its texture and overlapped like tar paper. I have done this for years and like the look. (Figure 13)

Now I needed rail gutters along with downspouts to help hide the front casting from the side. The slight warping of the castings, along with the issue of varying thicknesses, meant it was very hard to have a completely square structure. My first idea was to try splitting a small drinking straw, but it did not look right. I ended up using .303 x .100 strip styrene to make an older looking gutter. Figure 14 shows the bottom and one side being glued, and Figure 15 shows the finished product.

A test fit looked good and the ends were closed. This was also shot with the green window paint. Next was the dirty black for the roof itself. Before attaching the roof and making the downspouts, I wanted to get the lighting installed. LEDs can be extremely directional but in my roundhouse I used warm white “flat top” LEDs. These do a better job of dispersing the light. (Figure 17)
I drilled two small holes for each of the LEDs into the styrene “shelf”, one for each lead. (Figure 18) These were wired in series with the four on the left side on one circuit, and the other three on another circuit. The right side needed an 470 ohm resistor to limit the current, and try to match the brightness on the other side. Since buildings have different rooms and lighting, it is not a big deal to match them perfectly. I also spaced these so they would not be in front of any window, thus I eliminating the need for scale fixtures. All of this will run off a 12 volt buss. There is enough of the LED lead to push them into position after we get the windows in.

The last piece of styrene is for the back. Since I did not want light reflecting off the backdrop the building, it needed to be enclosed. The inside was painted black. I drilled and tapped the ends of the building for 0-80 screws so it would be removable if needed, (Figure 19) one on each end and one in the center. I simply glued a styrene spacer inside to accept this third screw. The red outline in figure 18 above shows this extra piece. The other white piece shown in the green outline above is a styrene tube. When the building is finished, this will carry the two wires out and under the layout for a 12 volt connection.

I used the windows supplied with the kits and shot them with the Floquil dark green, same as the gutters. As I showed in the September/October 2014 issue of The O Scale Resource, cutting real glass is fairly straightforward. Clear styrene just does no look right. This time, however, Tom Dempsy from Clover House suggested

Figure 18

Figure 19
an item he has back in stock. It’s clear .005 Clear Polycarbonate (LEXAN). It comes with a tear off protective coating on both sides to protect it while handling. Measuring the windows, I ran this material through my Cricut cutter and had seven perfectly cut pieces. Yes, you can use an X-ACTO type of knife, but the Cricut is actually faster for me. If you missed the article I did on building with the Cricut, you can view it here in the March/April 2018 issue of The O Scale Resource Magazine.

Peeling off the protective material from one side of the Lexan, I used Aleene's Clear Gel Tacky Glue. (Figure 20) Putting as blob on a small piece of wax paper and then using a tooth pick to apply very small spots around the inside of the window casting. Just before placing the Lexan on the glued window, I pulled back enough of the backside protective material so that I could get hold of it once dried without having to fumble and try to do that afterwards. (Figure 21)

Figure 22 shows the completed front. Figure 23 shows the lighting and the extra outdoor lights attached. Figure 24 above shows the front of the building with the Walthers HO lights I bought years ago when they were
“cheap”. I think they look just fine in O scale. These are now number 949-4311, but are set to be discontinued.

Now I know this is a flat, and many modelers don’t add anything inside, much less light them, but I wanted to at least give the impression that something was inside. All my flats will be at least 3 feet back from the front of the layout so I thought I would try something cheap. I have used pictures for the background of building interiors before, so I thought I would try that here as well. Going to sites like SHORPY and The Library of Congress digital collections, you will find many old images that will work. Figure 25 was one I used for the left side of the building. Reducing the size and arranging it behind the windows will give the appearance of something, and since the viewer is so far away, the detail is not that important.

(Figure 26) I know it’s not color, but for this application I think it works.

I quickly scratch built a loading dock out of scrap wood, added a few details and called it done!
I still have a lot of parts left over for another one or two buildings. (Figure 27)

This is no masterpiece by any means, but for my first real kitbash, I think it looks fine for a background model.

The lesson here is go ahead and try it, don’t be afraid of making a mistake and if you do, fix it and go on. I hope you enjoyed this, and also hope it inspires you to give kitbashing a try.
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

Sam Shumaker purchased this KTM kit (SP TW8) at Chicago this time around, and started building it beginning with the steam chest. It will have 26 parts installed on the steam chest alone when done. Not a project for the beginner!
Here is how to contact us:

Phone: 815-584-1577
FAX: 800-783-0127
Email: amy@oscaleresource.com
daniel@oscaleresource.com
Mail: The Model Railroad Resource LLC
     407 East Chippewa St.
     Dwight, IL 60420

www.oscaleresource.com  www.sscaleresource.com
www.indyoscaleshow.com  www.sscalemidwest.com
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 :-)
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.**

**The Cleveland 2 Rail 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: j3n5436@gmail.com  Sam Shumaker 440-248-3055
Website: www.cleveshows.com

**Rockford O Scalers Fall 2018 Open House**
Rockford O Scalers Fall Open House is Saturday November 3 from 12:00 noon to 6:00 pm in Rockford, IL. Contact Frank McCabe at 815-979-4161 (email: fsm1019@aol.com) or John Handlogten at 815-394-3451 (email: j.handlogten@comcast.net) for more information and directions.

**The 2018 Mass Transit & Trolley Modelers’ Meet**
November 3, 2018
The Parsippany PAL Center, 33 Baldwin Rd, Parsippany, NJ 07054
Trolley & Mass Transit Model Displays & Sales.
Email: transitmeet@yahoo.com
Website: http://nycmodeltransit.org/2018details.htm

**Chicago March Meet**
March, 15, 16 and 17th, 2019
Westin Lombard Yorktown Center
Lombard, IL
The Chicago O Scale Meet is a 3 day gathering of vendors, customers, clinics, and fun held annually in March in the Chicagoland area. This is the Chicago O Scale train show you've heard of.
Website: http://marchmeet.net/
Email: info@marchmeet.net

**O Scale National in conjunction with O Scale West - S West and Narrow Gauge West**
May 23-25, 2019
Hyatt Regency Santa Clara (San Francisco area)
Website: www.oscalewest.com

**O Scale South 2019**
January 19, 2019
Atlanta, GA USA
Cross of Life Lutheran Church, 1000 Hembree Rd, Roswell, GA
Type of Event: Swap Meet, Modular Layout and Layout Tours.
$5 Admission, $25 per 8-ft Table (Includes Admission), Spouses and Children Free. Info www.oscalesouth.com, Contact Dan Mason 770-337-5139 daniel@southernoscalers.com
Email: dmansfield302@comcast.net
Website: www.southernoscalers.com

Did you miss an issue of **The O Scale Resource**? Forgot to look? Well, **sign up here** and never miss another exciting issue. We’ll send you an Email when the latest issue is loaded to our site. Don’t worry, we won’t sell or post your Email address to anyone!

**Click Here to sign up today!**
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.

WANTED: Vintage O Scale Older the Better! Outside 3rd rail, Acme, Alexander, Birch, Egolf, Exacta, Icken, Pomona, Mutiplex Track, Model Structures Buildings, Walthers Streamlined steamer, Baldwin Niagara, early diesels, Bascele or Lift bridge, World's Fair pieces, Museum and Santa Fe RR pieces, Scale Model Railway, old controllers, etc.

Also looking for: Voltamp, Carlisle & Finch, Knapp and Howard.
Carey Williams   Email: wasp3245@aol.com   Phone:773-332-6121

For Sale: Overland Models O Scale F-M H-12-44 W/cab overhang AT&SF #503-504, NYC #9111-9120 or CNW #1071
OMI/0435/ O Scale Made in Korea by Ajin Precision Mfg.
Mint in box, never run. Everything in like-new condition.
$500
John Hankey   Email: johnphankey@aol.com

WHAT A SPECIAL TREAT!
WE ARE HAVING CAKE!
AND ICE CREAM TOO!

HELP JASON CELEBRATE HIS 4TH BIRTHDAY
THIS SATURDAY.

Come and enjoy the fun
ALL TRACKS LEAD TO FUN!

Look what you can do with RailFonts.com

The O Scale Resource November/December 2018 100
Advertisers Index

<table>
<thead>
<tr>
<th>All-Aboard-Trains</th>
<th>Pg 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny Scale Models</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Altoona Model Works</td>
<td>Pg 10</td>
</tr>
<tr>
<td>B.T.S.</td>
<td>Pg 73</td>
</tr>
<tr>
<td>Berkshire Car Shop</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Berkshire Valley Models</td>
<td>Pg 36</td>
</tr>
<tr>
<td>Clover House</td>
<td>Pg 36</td>
</tr>
<tr>
<td>Crow River Products</td>
<td>Pg 36</td>
</tr>
<tr>
<td>Delta Models</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Des Plaines Hobbies</td>
<td>Pg 36</td>
</tr>
<tr>
<td>Excelle Lubricants</td>
<td>Pg 84</td>
</tr>
<tr>
<td>Get Real Productions</td>
<td>Pg 35</td>
</tr>
<tr>
<td>JV Models</td>
<td>Pg 85</td>
</tr>
<tr>
<td>Key Models</td>
<td>Pg 35</td>
</tr>
<tr>
<td>Korber Models</td>
<td>Pg 85</td>
</tr>
<tr>
<td>Millhouse River Studio</td>
<td>Pg 85</td>
</tr>
<tr>
<td>O Scale Kings</td>
<td>Pg 85</td>
</tr>
<tr>
<td>P&amp;D Hobbies</td>
<td>Pg 85</td>
</tr>
<tr>
<td>Protocraft</td>
<td>Pg 10</td>
</tr>
<tr>
<td>RailFonts.com</td>
<td>Pg 100</td>
</tr>
<tr>
<td>Rich Yoder Models</td>
<td>Pg 85</td>
</tr>
<tr>
<td>Right-O-Way</td>
<td>Pg 36</td>
</tr>
<tr>
<td>San Juan Model Company</td>
<td>Pg 4</td>
</tr>
<tr>
<td>Stevenson Preservation Lines</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Streamlined Backshop</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Sunset/Golden Gate</td>
<td>Pg 2</td>
</tr>
<tr>
<td>Todd Architectural Models</td>
<td>Pg 10</td>
</tr>
<tr>
<td>Trainz</td>
<td>Pg 73</td>
</tr>
<tr>
<td>Wasatch Models</td>
<td>Pg 10</td>
</tr>
</tbody>
</table>
The O Scale Resource

Your Source for all O Scale

CHECK OUT OUR NEW WEBSITE FOR THE O SCALE RESOURCE MAGAZINE

The Model Railroad Resource LLC

Our Publications