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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
“Out of the fog”
Serge Lebel's Canadian National Railways Sanmore Subdivision is featured this time to kick off his new series on railroad signaling. And, it's not just another signaling article!

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.
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From the Publisher’s Desk

It’s me again! Amy is busy working on the O & S Scale Midwest Show, and we are happy to report that all vendor tables have sold out. We have also moved this to a Saturday/Sunday show that will allow many more of you to attend without work conflicts. We have some of the best vendors in both O and S scales, now all we need is for you to attend to make this a great show! We are the only major show that proudly lists the vendors that will be in attendance so you know who will be there and possibly contact them to bring that certain item or items along. We were able to add some additional sleeping rooms at the hotel, and the deadline was extended to September 30th, so if you have not made reservations do so now before the room block once again sold out.

The O Scale Resource Magazine is celebrating our 7th year of publishing. I was not sure this was going to work, but seven years later, and almost 6,000 readers per issue around the world speaks for itself. We can’t thank you all enough for making this a success. Did you know that the original O Scale Resource was started back in 2008? It was not a magazine back then, but a project to bring O scale information to the Web.

The screen capture on the right shows our first page and menu of advertisers. From these beginnings, Glen Guerra and I thought about an on-line magazine for awhile, but were not sure how to do it effectively. Well, a few years later we had the software and were ready to give it try.

A lot has changed from those early days. Glenn is no longer part of the company, but still write many great articles, and we added Jeb Kriigel to handle our advertising. We continue to do as many show as we can around the country to promote not only the magazine, but O scale in general. Amy and I will be heading out East for the Eastern PA 2 Rail O Scale Train Show and Swap Meet in Strasburg, PA this October 12th. Hope to see many of you there.

Once again, thank you all for reading and please continue to check out our advertisers and tell others about The O Scale Resource Magazine.

Happy Reading & Happy Modeling,

Dan Dawdy

Welcome to the O Scale Resource. Up to date Listings for model railroading in 1/48, also known as ¼” to the foot. The O Scale Resource has classified listings in Manufacturers, Dealers, Publications, Estate Liquidations, Proto 48, and Custom Builders.
Bill Basden of Delta Models says: Effective August 15, 2019 Delta models shop and manufacturing facility will be relocating which will be a major move, but will allow us to offer more variety in parts. We anticipate to be back up and running in about 6 weeks from the August date.

We will publish our new address and zip code at the appropriate time.

It was brought to my attention recently that we have gone out of business and were not offering our product line. I would like to flatly say this is not true. So if you hear someone say this, tell them it is not true. You can always check our website for the latest update that is done at least 2 times per month.

We look forward to serving you for parts in the future. Please see their Website for more information.

Model Tech Studios LLC has some new offerings. The Blacksmith "In action" swinging his hammer and holding his tongs. They also offer the Forge details to complete your blacksmithing scene.

In search of that elusive gold jackpot, this old prospector has his trusty rifle slung over his shoulder. By his side is Trudy, his "pack donkey". The donkey is carrying his most needed supplies for his trek for gold. Very nicely detailed.

Walter & Mary Gillespie of Rusty Stumps Scale Models have announced they will be closing down on or before October 31st.

We wish them the best in their retirement from the business.

See their Website for all their fine products.
Bill Yancey from Modern Era O Scale has announced new kits coming later this Fall.

The Soo car is the famous 7 post 50’6” car that was built at Fond du Lac shops for many years. This model represents the car as built in mid 1970s. Both Boxcar Red with white lettering and white and red with black lettering are correct for these cars.

New kits have a subtle ‘oilcan’ feature on the sides. SOO decals in white or black are available from Modern Era O Scale. All kits remain priced at $160. Trucks, couplers and decals not included. Models available this fall. No pre-orders please.

Richard Segal from Right On Track Models has a new item, a Fairbanks Morse 100 Ton Coaling Tipple. Based from the prototype that was built for the Michigan Central Railroad in 1918 and stood in the yards at Grand Rapids, Michigan. These kits feature precision cut MDF wood, highly de-tailed impact styrene windows and doors as well as resin and metal parts. The kit will offer our new “Real Scale Rolled Asphalt roofing material”. Complemented with easy to follow step by step color instructions. Check their website for more info on preorders pricing and release dates on this kit and our other O kits.

Rusty Rail has some new products this month.

The SP car is the one built by FMC and has some design features different from previous FMC cars.
A new junk pile that will work outside by any building or since it has no base can go inside a building or shop. Check out the detail. The casting measures 4 1/2" long by 1" wide and 1 " tall.

Also a square vent that comes in pieces so you can make is smaller. Minor assembly. You add these to existing building on your layout to add to the detail. The vent is 2 1/2" long with all the parts added.

All resin casting and comes unpainted. See their Website for more information.

New from Motrak Models is an industrial water supply tank has an unique look to it. It will be a conversational piece on your layout.

This water tank was on my diorama for my Bisgeier Tool Company kit and lots of people asked me if I'd sell the water tank as a separate kit. This water tank is almost 37' tall, 13’ wide, and 22' deep (including the pump house and the ladder) scale. You will get the pipe that goes from the pump house to the tank and a pipe that goes into the ground. If you have a building that is shorter than the water tank, you could have the pipe go to the building if you want extra detail.

The kit includes:
- Laser-cut tarpaper
- Laser-cut tank walls
- Laser-cut pump house walls
- Bunch of stick pieces
- Piping
- Easy to follow instructions with templates

See their Website for more details.

NorthWest Short Line is Back

NorthWest Short Line is pleased to announce that the entire line has been acquired by an NWSL employee, effective September 3rd, 2019. All existing back orders will be filled, and NWSL will be open to new orders as soon as the new websites are rolled out; the primary website will carry forward as the primary contact point.

The line is expected to carry forward largely unchanged although the company will no longer offer phone support. NWSL will be headquartered in Kila, Montana, located near Kalispell, and the new address is PO Box 219, Kila, MT 59920. Email contact is through the website.
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Saving Our Scale

By David Vaughn

Two-rail O Scale modeling is a special, satisfying experience. The mass of the models allows satisfying operations. The size of the models allows for more detail and for greater appreciation of each individual engine, car and structure. A train of metal-wheeled two-rail O Scale models clanking across a steel-railed crossing gives an imitation of full-sized railroading which smaller scales simply cannot duplicate. Most O Scale modelers started in another scale and converted. Few – if any – would go back. Two-rail O Scale is just flat out more fun than other model railroad scales. Not biased; just stating facts.

Two-rail O Scale has a rich history. It was at one point the dominant scale in model railroading, bigger than HO and all other scales combined. There are generations of excellent O Scale models and O Scale modelers. But two-rail O Scale has been eclipsed by smaller scales (HO and N), larger scales like garden railroading and 1:48 three rail, notably Lionel and MTH.

No two-rail O Scale modeler I know would want the scale to die. There is a connection between the models and modelers in the scale which I have not found in any of the other scales. Simple as that. And there are certainly bright spots in the scale, such as the full-service line offered by Atlas, the brass (and plastic) models from Sunset/3d Rail and the growing On30 community. There are excellent, younger modelers entering the Scale.

But make no mistake: the continuation of two-rail O Scale as a viable part of model railroading is under threat. More people are leaving the scale – almost entirely as a result of age – than are entering. Attendance at SONCs and O-Scale specific shows has declined. The average age of attendees is not dropping. It may be going up. Secondary market (read “used”) prices for O Scale models have fallen significantly in recent years, by simple application of the principle that prices drop when there are more sellers than buyers. While a variety of models is still available, there are fewer new models and new manufacturers. The Scale is a niche – less than 2% of the hobby – sliding toward being an anachronism. Can’t happen? Check with your nearest OO or TT modeler.

My premise is that two-rail O Scale is worth saving and that, by deliberate and Scale-wide effort, the decline can be turned around. This exercise will be like turning an ocean liner. Takes effort, takes people and takes time. From a selfish point of view, restoring O Scale to greater visibility and support means there will be somebody to buy our stuff (remember that hobby shop of unbuilt kits in your basement?) And honor the hundreds of hours you put into super-detailing that engine, boxcar or structure. But more importantly, turning the scale around will enable us to share the terrific – unparalleled? – experience of working in two-rail O with more people. A larger number of participants and will also bolster the manufacturers, publications, clubs, shows and modelers who make our hobby in our Scale possible.

With due apologies to General Pickett, the Scale ain’t gonna save itself; and I am gonna lead this charge. I do not have a monopoly on wisdom, let alone tactics. I am going to need help from any and all of you in this effort. Dan and Amy Dawdy – two of those bright lights I talked about – have agreed to provide me with a platform for this effort through OSR. Thank you.

True confessions: I am a convert from HO (and some dabbling in other scales). I was sucked into two-rail O Scale in about 1983 by friends who connected with John Armstrong and his ground-breaking Canandaigua Southern O Scale railroad. A testimonial: working two-rail O Scale is just more satisfying than other scales. Not
even close. As a convert, I saved and reinstalled much of John Armstrong’s and other historic layouts as part of
my own layout after John’s death (see the article on this in Great Model Railroads 2016). I served on the Board
of the O Scale Kings, co-chaired three Indianapolis/SONC shows with Jim Canter and chaired the successful
2018 Rockville Maryland Scale O National Convention. I know a little about making things succeed and a good
bit about how not to do it (we get the wisdom to make good decisions from experience, and we get experience
by making bad decisions). I am a believer in and supporter of NMRA. I also head the Nickel Plate Historical
and Technical Society in order to support my favorite road.

I am setting up a blog to develop both strategy and tactics to restore two-rail O Scale to the prominent place
in model railroading which it deserves. I need your ideas as to how to accomplish that. Everybody and every
organization, from individual modelers through clubs through organizations, shows and manufacturers needs to
have a role if we are to be successful. I know not everyone believes that such an effort is needed or, if needed,
not everybody believes it can be successful. If you believe there is no problem, this is probably not the blog for
you. If you believe that the problem became irreversible after Adams and Son closed its foundry, when
Lobaugh failed to come back after WWII or when Walthers ceased publishing its O Scale Catalog, this is not
for you either. I am looking for forward-looking, constructive involvement from any and all participants.

I am looking for an interactive discussion on each of several topics – and some topics or sub-topics to be
added later – on how to bend the curve for two-rail O Scale. Ideas. Proposals. Questions. Resources. Referrals
to others. I will compile the postings, consolidate and edit them and transmit the results to OSR for publication.
I will review each comment as it comes in and respond as appropriate. I will monitor the blog and reserve the
full and unlimited right to delete or edit objectionable or off-topic material. At the end of this process, and with
the help of interested participants, I expect to have the outline of a campaign to revitalize two-rail O Scale. To
explore participation and obtain the blog information, please contact me at NKP48@aol.com.

Save Our Scale
Join a blog dedicated to Revitalizing two-rail O Scale
Your Input Needed
Inquiries to David Vaughn NKP48@aol.com
SONC 2020 Convention

O Scalers,

I am excited to announce the next major SONC 2020 Convention and our Executive Committee!

As Chairman, John Wubbel, it is my pleasure to share in this responsibility with Co-Chairs Matt Norby hailing from Denver, Dick Donaway from Iowa and Nick Bulgarino modeling in the great state of Maryland; where in Rockville the 50th O Scale Convention was convened in 2018. I hope you will reserve time on your calendar to attend on July 16th - 18th 2020 as we will try to make this one of the most well attended meets to bring the East Coast, Mid-Continent and West Coast modelers together to share stories, models, modeling techniques, trading, clinics, and tours to mention a few activities planned. Oh yes, and let’s not forget about our O Scale friends in Canada either.

Most exciting is that SONC 2020 will take place along side the NMRA's Gateway 2020 National Convention in St. Louis. Did I mention we will be holding our convention in St. Louis?

Working in partnership with the NMRA, our mutual goal is to invite more people to the hobby, expand or social network to share the enjoyment we all have experienced with many others in our communities. Above and beyond that, twin conventions can offer more choices to attendees in terms of shared venues and events.

The O Scale Kings has a unique opportunity to participate and expand its reach and growth. This opportunity to grow supports more member services and support for future conventions. This is a unique 2 part occasion where first, all O Scalers can partake in a very worthy project by signing up now to help put on the convention; and second, to volunteer a little time during the convention that will earn some monetary value back to the O Scale Kings organization. If you must call this work, you cannot say it is not fun collaborating with fellow model railroaders, the very best experiences I have ever had in more years than I can recall going to conventions.

Please contact me to find out how easy it is to join in the fun by cell phone/text message 570-580-7406 or email jwubbel@gmail.com

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● Registrar
● Management Positions: Dealer Manager, Clinic Manager, Layout Tour Guide Manager
● Diplomat Liaison with NMRA
● Judge - Model Contest Regulations
● Auctioneer
● Finance/Fund Raising
● Secretarial Light Record Keeping
● Product Specialist T-Shirt Designs Logos, Convention Model Sales

Please contact me to find out how easy it is to join in the fun by cell phone/text message 570-580-7406 or email jwubbel@gmail.com
By Robert Helm

Let’s just say I change my mind a lot when it comes to modeling. Born in Lima, Ohio just down the street from the Lima Locomotive works I was meant to love railroading. I can’t explain why, but I have loved trains ever since I was old enough to see them. My first Lionel set as a child got me into model trains. I just kept on going after that. At age nine, I found HO and built my first layout. I love all railroading, so when a cool prototype comes along, the bug bites hard. Sometimes that means changing scale like from HO to O scale, but keeping the same prototype.

Two Western Maryland H-8s cross the bridge out of Elkins yard on their way to the coal tipples in West Virginia. Engine custom painted by the author.
As for a prototype, my choice is Western Maryland Railway. I’ve always had my eye on the Western Maryland being a long time Clinchfield HO coal modeler. When you see that brass engine you just have to have, buying it sets a whole series of events into motion. For me, it is the Western Maryland H-9. I purchased two Oriental brass HO scale engines and began researching. Searching for photos and videos of them in action, I came across a couple books and old films of WM trains shot in the early 1950s. Steam is exciting! The lure of multiple big 2-8-0's climbing a 3+\% grade in Blackwater Canyon and hauling a coal train was exactly what I was looking for to model. The Western Maryland is like the Clinchfield, as it was a smaller regional Class One railroad that had to cross the mountains to get coal to port. Sure, Western Maryland is known for its fast freight, but a train with 10 H-9 engines with mid train and rear helpers hauling coal out of West Virginia coal fields is where the excitement is for me.

In 2016, I took a new job and we upgraded to a new house. We had talked about downsizing, but the new house fit us at this time in our lives. Getting ready to move, I had to tear down my old HO layout that I had started building in 1998. It was up for almost 15 years and mostly completed to scenery. I had done and conquered the Clinchfield. I spent a couple years dabbling in HOon3 and SN3 in Rio Grande fine-scale, but it never stuck. My real love is in coal railroading. Western Maryland was my new passion.

On January 1st, 2017, I started building an HO coal layout with no real prototype yet. My motto was, "Get something built and start running trains." That layout eventually evolved into the Western Maryland Black Fork Railway layout I currently have. Starting in HO, I proceeded to get the mainline built and trains running. I had done some scenery including the Blackwater canyon and was happy with the look and feel of scenery. We were able to run 70 car coal trains with six or seven engines up a 2.5\% grade in the canyon.
Western Maryland coal train with multiple H-9 consolidations. Bill Price photo
Above: Author’s HO scale layout Elkins yard.

Below: Douglas on the Blackwater River
While my planned train length was about 40 cars with four 2-8-0 engines, I found that my engineering and building standards allowed much longer trains. Why not do what the prototype did and run a few "Wow" trains?

![YouTube](https://i.imgur.com/36x.png) View Robert’s video here!

That was HO. As we age our eyes get worse and presbyopia sets in. You just can’t seem to get strong enough reading glasses to see fine detail parts and repair HO scale engines. Like most other modelers my age, O scale became more appealing. I had met several O scale WM modelers on Facebook.

Their layouts impressed me. One layout that is well done is that of Industrial Models Movie-hub on YouTube. It represents Appalachian coal hauling so well that it inspired me to investigate O scale modeling. Other excellent modelers like Dan Pence, Pat Mitchell, and Ken Kime are building O scale Western Maryland layouts. A visit to them this spring got me motivated to convert my layout to O scale 2 rail. While I’m not into Proto 48, O scale equipment is available in Western Maryland. Overland had done the H-9 2-8-0 and Parri, PSC, and Yoder all made hoppers and Overland had cabooses, so I just had to acquire them.

The great thing about O scale modelers is that I have met some of the nicest guys that are willing to help you when you’re a "youngster". I’m 55 so it’s a great time to get into O scale. I just happened to find a large collection of O scale Western Maryland brass for sale. Now, everything lined up for a great layout.

One big question! How do you convert an existing HO layout to O scale? Can it be done? I am converting a 2-year-old HO layout to O scale 2 rail. My layout basement rooms are approximately 1200 sq. ft including a den and garage section that are finished and semi-finished rooms. The original HO plan was for a one level layout with a 250-foot mainline that I designed to go around the room with three peninsulas. There are two yards, one at Elkins and one at Thomas modeled close to prototype with compression due to space limitations. The layout construction began in January of 2017. I had the HO layout about 3/4 of the way built to trackwork with some scenery on Elkins yard and the Blackwater canyon.
Right: HO Scale trackplan.

Below: New O Scale trackplan.
The new plan is mostly one level but, there is a short section of double levels. The yards are both at 56-inch height and the grade requires starting elevation off the floor of 40 inches. As on the prototype, I decided to drop the mainline down to the lower level on a 2% grade called Haddix hill. I planned for one long passing track on the lower level which is Montrose. I also have room for the town of Parsons, WV with one industry, station, and passing track. The mainline continues around the peninsula to Hendricks, WV passing track and stations. In the early days, helpers were located here with a small yard and industry. In the early 1950s, helpers returned to Elkins to be put on the train there in the yard. Hendricks is the start of the Black Fork grade up Blackwater Canyon to Thomas. The prototype grade is approximately 3 percent with some 3.2% sections. My modeled grade is 2 percent with some sections of 2.5%. This makes for interesting operations with H-9 helpers added at Elkins shoving the coal train up to Thomas where helpers are cut out mid train and from the rear. I am primarily using Western Maryland H-9 consolidations for mainline service with a local powered by a smaller H7b 2-8-0 and one WM 4-6-2 pacific and then F7s and RS3s in early diesel service. Each coal train requires multiple helper engines to make the grade. Operations will include coal trains going eastbound, one mixed freight with empty hoppers, empty hopper trains, a local and two passenger trains.

The original HO layout was built with a 30-inch (072) radius curve minimum. There were a few 30-inch curves in place. In Blackwater canyon, the curves are sharp at a 30-inch radius on a 2% grade. When tearing out the HO track, I left the cork roadbed in place and temporarily laid Atlas O code 148 flex track in its place. Being careful to provide very large easements into curves and broaden the radius, I began testing with a MTH scale wheel H-9 2-8-0. Using small wheelbase O scale engines lets you get away with a lot of sharper radius curves. Testing showed that this engine and an Overland H-9 both would make the curve that is approximately 32-inch radius; however, the front drivers would sometimes pop off the rails on the curve under heavy loads. This was not acceptable, and I have now set a 36-inch curve radius minimum. This also required some regrading of sub roadbed to fit the large radius and moving some scenery. Since I use a flexible Rosin paper glue shell on top of cardboard webbing, it can be cut and moved easily. Also, I use rubber rock castings so they are easily hot glued into place and can be reused. Testing the actual engines you use is very important if you
plan to convert from HO to O scale. While a 36 inch radius works on small locos, a 48-inch radius minimum is much better in general. Larger O scale steam engines may require 54 to 60-inch radius so bigger is better.
I relaid the yards with curve tracks at 4-inch centers and no sharper than a 40-inch radius to make them look better. So far everything is working well on operations testing. My preference on flex track is Microengineering with Atlas O scale turnouts. I decided not to hand lay the turnouts due to the time it takes to build them, cost of materials and they are hard to move once glued in place. While Atlas O scale turnouts have their problems, they work well with some minor fixes, gauging, powering and filing on a few.

Currently, I am still laying track in the Elkins yard. I just added service tracks for engines and cabooses and have a few track and structures to add to finish this yard out. Thomas yard is laid and wired. I decided not to have a staging yard as two visible yards and a loop allows you to restage trains easily. As on the prototype, you can see the trains parked in some yard somewhere. All trains have a start and destination. I may add some hidden staging in the future, but space doesn’t allow for it now.


Author: Dr Robert A. Helm lives in East Tennessee and has an optometric medical practice. Robert is the author of the book “Clinchfield in the Coal Fields”, TLC publishing 2004 and has written articles for the Clinchfield Historical Society newsletter. Robert received the Model of the Month award from Model Railroader magazine and was the founder and president of the Mountain Empire Modular Railroaders. Robert studied Engineering and Premed at the University of Tennessee and received a Doctor of Optometry at SCO in Memphis.
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The O Scale Resource September/October 2019
I often wondered why so few layouts had operating signals. That was before I decided to get my layout operating with signals, of course! Now I know why so many modelers shy away from signals and CTC operations... In my forty years of model railroading, and after building several layouts, I can validate that in my personal opinion, building an operating signaling system is the most involving and complex part of building a layout.

I know that many of you are saying right now, “Not another signaling article!”, and you are right to do so. This is yet another one of these articles. But stick with me for a while, as some of what I will be sharing will serve you in many other aspects of the hobby. This article will be divided in series that will each feature and explain how to build all the various components of the signaling system; CTC machine, signals, and control logic. I will share with you not only how to etch your own brass parts to make signals, but also how to make your own brass etching tools, and PC boards. This can seem overwhelming at first glance, but I will show you how I built a signaling system that was simplified, and can be built by anyone. With basic tools and by purchasing supplies available online, you will be able to build this system for your layout.

I’ve built seven layouts in my 40 years of model railroading, ranging from room size layouts to full basement size layouts. Out of the seven layouts, I only had two that featured signals. And out of those two, this one will be my first to feature operating signals. By operating, I don't mean signals that simply light up, but rather signals that react to track occupancy, dispatcher commands, and show actual complex railway operating rules aspects.
Before going any further, I need to let you know that there are many existing signaling systems on the market already. I did a lot of research and talked to many of the manufacturers. Also, I used to own a custom signal shop where I built signals in N scale for over 20 years, and this is how I got in touch with many of the systems manufacturers. If building the entire systems seems like too much work, you can check the existing systems and save a lot of time (and troubleshooting!). That all depends on how you want your system to operate. Some systems cannot display the more complex signal aspects; some systems can, but only use computer logic, so a mechanical CTC machine is not an option; and others will affect the very fragile DCC environment and make your trains act weird. And finally, some systems use JMRI or similar software and require some computer programming skills. The system I designed is not by any means better, and it does not offer all the great features that most of these systems do, but it has the major options that were important to me: being able to control my signals in a realistic manner from a physical CTC machine without having a computer involved. The secret to my signaling system being able to display complex signal aspects is not in the signal logic, and not in any programming... It is in the choice of LED's that I use and the way the signals are wired. This is why you have to make your own signals if you want this simple system to work.

So, what does it do??

Here is how my signaling system works. Let's say you are the engineer on the Southbound passenger train, idling in the siding at Jaypee. You are currently facing two signals, one for the main line track next to you, and one for the siding track you are on. Both signals are showing red over red, which is an absolute stop. At the CTC machine, the dispatcher turns the switch lever for South Jaypee to reverse, and the signal lever to R (right) to prioritize right bound (southbound) traffic, and hits the send code button on the CTC machine. The “code” or in this case, the current, flows to the switch motor and turns it in reverse, and the signal in front of you shows a red over green aspect, which is a “slow to clear” that allows you to proceed. The moment your locomotive enters the controlled location (the section of track that is the turnout), all the signals drop to red and the CTC machine shows an occupancy on the O/S block, confirming that you are crossing the switch and are on your way. These signals will remain to red until the dispatcher sends another command and hits the send code button for this block. In a nutshell, this is what you would see and what the dispatcher would do. So far, this is how things should look in the real world. The only place where my system is lacking, and that was done on purpose in order to keep things simple, is on the approach signals. Approach signals will show aspects that reflect the state of the signal (at the controlled location, or O/S block) it precedes. So if the O/S shows a red (stop) signal, the approach will show a yellow, or yellow over red (in signals with two targets) telling the engineer to prepare to stop (called a clear to stop). In normal operations, once the approaching train has occupied that block (the moment the train runs by the signal), that signal (approach) would drop to red. This is where my system fails to meet all these conditions, and the signal will simply keep showing it's current aspect. Not a big deal, but it might be a deal breaker for some layout owners.

Learning the lingo…

If you decided to have an operating signaling system instead of just having signals on a layout that act as a scenic element, that means you are serious about operations. So for this first installment of the article, you will have to do some homework.

Prototype railroad signals are very different from roadside traffic lights, even if they look similar because of the green, yellow and red lights. Now I will not go into details on how signal aspects are read, simply because there are many ways these can be interpreted based on the many rules and regulations in place. Being from Canada, I operate with the CROR (Canadian Railway Operation Rules) which are somewhat similar to the signal rules in the United States, but with different rule numbers. I leave it up to each and every one of you to decide which rules to use and to learn the signal aspects. But for the purpose of this article, I will show you the ones I use and how they are read.
First, let's look at the terminology of the various parts that makes a railroad. Here is a list of the basic elements you need to know and understand; these are only the definitions used for the purpose of this article and do not represent the entire railway operating rules. Refer to the Official Railway Operating Rules for the complete rule book, available on-line on the Transport Canada website as a 96 page PDF download.

**Speeds:**

**SLOW speed:** A speed not exceeding 15 miles per hour.

**REDUCED speed:** A speed that will permit stopping within one-half the range of vision of equipment.

**RESTRICTED speed:** A speed that will permit stopping within one-half of range of equipment, also prepared to stop short of a switch not properly lined, and in no case exceeding 15 miles per hour.

**DIVERGING speed:** A speed not exceeding 25 miles per hour.

**MEDIUM speed:** A speed not exceeding 30 miles per hour.

**LIMITED speed:** A speed not exceeding 45 miles per hour.

**Definitions:**

**Advance signal:** A fixed signal used in connection with one or more signals to govern the approach of a movement to such signal.

**Block:** A length of track of defined limits, the use of which by a movement is governed by block signals.

**Block signal:** A fixed signal at the entrance of a block to govern a movement entering or using the block.

**Controlled location:** A location in CTC the limits of which are defined by opposing controlled signals.

**CTC:** Centralized traffic control.

**Controlled signal:** A CTC block signal which is capable of displaying a stop indication until requested to display a less restrictive indication by the rail traffic controller.

**Non-main track:** Any tracks other than those listed in time table columns as having CTC, OCS, ABS or cautionary limits applicable and unless otherwise provided include a requirement to operate at reduced speed.

**Switch:** A device used to route equipment or a track unit from one track to an other.

**Dual Control Switch:** A switch equipped for powered and hand operation.

**Electric Switch Lock:** An electric lock connected with a hand operated switch to prevent it's operation until the lock is released.

Non-main track hand operated switches will show a green target for normal position and yellow taget for reverse position.

Main track hand operated switches will show a green target for normal position and red target for reverse position.
Now, let's look at the different tracks, and signals that are needed to run a railroad, and the various sections of track they govern. We will take my layout as an example. Here is my track plan:

Track line display:

My layout has a single mainline which runs in both directions. It has three staging yards (Oak Ridge, Ludger and Delos), three sorting yards (Campbellstoke, Chattaway Falls and Douglas Cove), which includes passing sidings, and one dedicated passing siding (Jaypee). Trains are mostly freights, but there are also two passenger trains, two work trains, and one way freight. All this traffic needs to travel over the same mainline track, so a dispatch and some signaling is needed to keep everything flowing smoothly. Now the number of trains and their content is not really important for the design of the track diagram, but it is good to know as all this traffic needs to meet somewhere on the layout.

Here is your first homework: Draw your track plan in a single straight line, from what you model as the starting point of your layout all the way to the ending point. On this single track line, draw all the sidings that you will use as passing or meeting tracks, making sure to put them on the correct side of the main line, draw all the yards (just the yard access track, not all the yard tracks), and draw all the junctions that connect to your main line.

Photo above is an example of a Controlled location, which is the section of tracks between opposing signals (the section of track where the turnout is located).
Canadian National Railways Sanmore Subdivision
Track Plan
You do not need to draw all the industrial sidings, spurs and other tracks, unless they have a direct access to your main line, in which case they will require an electric lock switch and will be displayed on the CTC machine. (Usually, spurs and other tracks are stemmed off a siding so that switching can be done away from the main line). The purpose here is to have a diagram of the usable tracks where trains can meet under the controlled supervision of a dispatcher.

Look at my track plan, and look at the single track diagram of my layout: tracks in bold lines are the tracks that will be affected by the signaling and detection, while the yard tracks and staging tracks are displayed in outline only, because they are non-detected tracks. You will notice a few industrial spurs are outlined also. These are not detected tracks but since they access the main line directly, they need to be on the CTC display in order to have the lock display for the rail traffic controller.

**Signals:**

Signals come in various shapes and configurations. I chose to go with “D” style signals. These are very popular on many railroads. D style signals have one light for each color aspect (ex: green over yellow over red in a single target). Also very popular are the “SA” type signals (see diagram below), but due to the way my signaling logic works, I can not use this type of signal. There are many other signal types, like G style and position lights signals, which I will not cover in this article.

**Signal Types: “D” Style vs “SA” Style**

- **“D” style signal**
  - Separate signal lights on same target.
  - Can be single or multiple targets.

- **“SA” style signal**
  - Combined signal lights on same target.
  - Also can be single or multiple targets.
  - (not supported with the type of control in this article)
What are the signal aspects telling you?

One thing about railroad signaling is learning what the colored aspects mean. These meanings can vary between railroads. Some research on the Internet will most likely help you to find the signal aspects for your prototype railroad. In my case, I am using the Canadian Railway Operating Rules aspects.

So in keeping with the D style signals, here is a list of the various signal configurations I use on my layout. First, let's look at the shapes of the signals only, diagram 3.
Now, taking these signals, let's look at what the different colored lights mean. Let's start with the block signals and approach signals, diagram 4.

**BLOCK SIGNALS / APPROACH SIGNAL ASPECTS**

**SINGLE TARGET**

- **Signal Display:** Green
- **Signal Aspect:** Clear
- **Definition:** Proceed at normal speed
  - Rule 405

- **Signal Display:** Yellow
- **Signal Aspect:** Clear to stop
  - Rule 411

- **Signal Display:** Red
- **Signal Aspect:** Restricting (because of the presence of the small yellow "R" sign)
  - Definition: Proceed at restricted speed
  - Rule 436

**DOUBLE TARGET**

- **Signal Display:** Green over red
- **Signal Aspect:** Clear
  - Rule 405

- **Signal Display:** Yellow over red
- **Signal Aspect:** Clear to stop
  - Rule 411

- **Signal Display:** Yellow over red flashing yellow
- **Signal Aspect:** Advance clear to slow
  - Rule 408A

- **Signal Display:** Red over red
- **Signal Aspect:** Restricting (because of the presence of the yellow "R" sign)
  - Rule 436

**Diagram 4**
Next, we look at the controlled location signals, diagram 5.

**CONTROLLED LOCATION SIGNAL ASPECTS**

### HOME SIGNAL
- **Signal Display:** Green over Red
- **Signal Aspect:** Clear
- **Definition:** Proceed at normal speed

**Rule 405**

- **Signal Display:** Yellow over Red
- **Signal Aspect:** Clear to Stop
- **Definition:** Proceed at normal speed, be prepared to stop at next signal

**Rule 411**

- **Signal Display:** Yellow over Yellow
- **Signal Aspect:** Clear to Slow
- **Definition:** Proceed, approaching next signal at slow speed

**Rule 409**

### MAIN LINE SIGNAL
- **Signal Display:** Green over Red
- **Signal Aspect:** Clear
- **Definition:** Proceed at normal speed

**Rule 405**

- **Signal Display:** Yellow over Red
- **Signal Aspect:** Clear to Stop
- **Definition:** Proceed at normal speed, be prepared to stop at next signal

**Rule 411**

- **Signal Display:** Red over Red
- **Signal Aspect:** Stop
- **Definition:** This stop is absolute

**Rule 439**

### SIDING SIGNAL
- **Signal Display:** Red over Green
- **Signal Aspect:** Slow to Clear
- **Definition:** Proceed at slow speed through the controlled location, resume speed when train has cleared the block

**Rule 431**

- **Signal Display:** Red over Flashing Yellow
- **Signal Aspect:** Slow to Stop
- **Definition:** Proceed at slow speed through the controlled location, be prepared to stop at the next signal

**Rule 435**

- **Signal Display:** Red over Red
- **Signal Aspect:** Stop
- **Definition:** This stop is absolute

**Rule 439**

*Diagram 5*
Flashing aspects: If your signaling requires a flashing aspect, I am sorry to say there are no slow blinking LED's in the format needed for these signals that will give you the correct flash rate. Actual signals flash at 56-64 fpm, which is a cycle time of 1.07 seconds down to 0.9375 (data supplied by Calvin at Circuits4Tracks). So I looked on the Internet and found on EBay a railroad crossing signal flasher. The flash rate is 1 second on, 1 second off, which is close to what I wanted. By using only one of the crossbuck light terminals (both needed to be wired to a led for the system to work, so I put one LED under the layout where no one would see it), I got the flashing device I needed for my signal aspects. To find this on EBay, look for Basic Flasher Circuit Board to Flashing Rail/Road Crossing To Flashing Rail/Road Crossing by seller appleton4487. The gentleman's name is Joe Keenan and you can also reach him via email at joe_keenan@roadrunner.com.

So, now that we know what the signals are used for, let's take one controlled location and place the correct signals, including the approach signals... See diagram 6 below:

If you look at this diagram, you will see that the red arrows represent trains, or traffic flow. It is a good practice to have signals facing a train placed on the right side of the track (engineer's side) whenever possible. The only exception is when you have a main line and a passing siding next to each other. In this case, each signal is placed on the side of the track it governs. Block signals are often on the same mast and have their targets placed back-to-back. (Yes, one direction will have the signal on the conductor's side with this set-up, but railroads do it to save on signal structures). Yet, some railroads prefer always having the signals on the engineer's side so the signals are on both sides of the track on their individual structure.

Here is your second homework: Using your track line display and the knowledge you now have of the signal configurations, make a sketch of each controlled location on your layout and place the correct signals in their respective place. Also, take the time to figure out what signal aspects you want each signal to show. Make a very detailed list as you will need this information later when you get to build your signals. You need to know what signal goes to which side of the track so you can build them accordingly (placement of ladders and platforms), and know how many wires to bring to each target. Write all this down very clearly, it will serve many purposes along this project.
We have learned that blocks on the mainline are usually at least the length of train or longer. On your average prototype, there is a number of blocks (two blocks or more) that separates each controlled location. Because my layout (and probably most layouts) is too small to have many blocks between the controlled locations, block signals (which are back-to-back targets on the same mast) will actually serve as approach signals also, for both directions. As you saw in the signal configurations diagram, a block signal is a single target signal, while approach signals can be a single target signal, or a double aspect, offset target signal. It is a good practice to always have the same configuration of signals all over the railroad, but in my case, I chose to mix both the single and the double target configuration for the approach signals. This creates an interesting signal configuration. So the approach signal to a yard will have an offset 2 target configuration, while the opposite direction signal on the same mast, which is the approach to a passing siding, will have the single target configuration. The photo below shows the approach signal at mile 14.2 on my layout. The double target side is the (Eastbound) approach to West Campbellstoke, which is a yard. The opposite side shows a single target and it is the (Westbound) approach to Chattaway Falls, which is considered as a passing siding, even if it gives access to the yard tracks in Focs Junction. See photos below.
Here is another homework: decide which type of approach signal you want to use on your layout and place them on your signals sketch. Again, this will be needed when you get to build your approach signals. Remember, having two separate block signals on each side of the track (one for each direction) makes for more signals to build, but having a single, complex back-to-back block signal can also be a challenge to build!

**What are these numbers on the signal mast?**

Signals are referenced by the dispatcher (to give permits) and by the signal maintainers by numbers found on a board attached to the signal. These numbers actually have a logical system: the numbers are based on the closest mile in that subdivision. Usually, a subdivision starts at mile 0. Depending on the railroad, the mileage increases in either North to South or East to West direction. On my layout for example, mile 0 on the Sanmore subdivision starts in Oak Ridge where the staging (or yard) tracks merge on to the main line. Heading in a Westerly direction, the miles are increasing towards the other end of this subdivision. When reaching the Lacroix subdivision at the West end of Chattaway Falls, the miles are reset to 0 for the next subdivision, which is a South to North configuration.
All signals on these subdivisions are at a specific mile. East Campbellstoke is at mile 5.4 on the Sanmore sub. So the controlled location in East Campbellstoke is designated as (CL54). The West bound signal which is in this case the home signal, is designated as signal 54, while the two East bound signals which are just a bit further up the track (1/10th of a mile) at mile 5.5 are designated (for the main line signal) 55 and (for the passing siding signal) 55B. Because both signals have the same mileage, the siding signal has the "B" added to it's designation.
Reaching the other end of that siding, West Campbellstoke is at mile 76, so the controlled location is designated as (CL77). You will notice that one controlled location has an even number while the other has an odd number. This is simply because the controlled location designation is always the home signal number. At this location, the first signals you reach are the main line and siding signals at mile 7.6... These are numbered 7.6 and 7.6B, and the signal at the other end of this location is the home signal, which is facing East at mile 7,7 and is designated as home signal 77.
Next homework: Look at your track plan and your track diagram, and decide what your subdivisions are. Some layouts have many, some model only one specific subdivision. Then, decide on the priority of your traffic flow (North/South or East/West) and then decide on the mileage of your subdivision. Go back to your signal placement sketch and write down the mileage of each controlled location. This will determine the signal numbers you will be needing for your operations. Make a list of all the signal locations and their numbers. Do the same with the block/approach signals, junctions and spurs if you have any. See the chart below which I created for my layout. Diagram 7 below.

If your layout is already built, run trains and try to schedule meets, and see how your traffic flows. You can even print signal aspects on paper and place them on your layout just to test operating with signals. This is a lot of fun when you can have a few operators over and get a feel for what a signaled layout will be like. If you are at the design stage of your layout, practice running trains on paper and see if your traffic makes any sense. I did that a lot before building my layout, and it led me to make some very important changes in my track plan...

Better to do it on paper than having to rip out some of that hand laid track!!!

In closing this article...

During an operating session, the dispatcher will make all the decisions on where the traffic will meet, who leaves the yards and when, and will set the controls on the CTC machine to that effect. He will also give track occupancy permits to switching crews and work trains, locking all
signals in these blocks to an absolute stop, protecting them while they have track time to do their job. He will monitor the electric switch locks on the spurs and junction tracks so that no trains can set themselves on a collision course with the traffic on the main line. He will monitor all the slide detectors, defect/dragging detectors, and issue slow orders if needed.

Operators will take their written permission and slow orders along with their switch list and train manifest at the dispatcher's office, then run their trains as per the instructions of the dispatcher and the signals they are coming across. Operating a layout with signals and dispatcher can be a fun experience that brings more enjoyment out of having a layout and running trains.

In the next installment, we will be building the CTC machine. Meanwhile, have fun learning and teaching all this information to your crews. Test them on their knowledge of the rules, signals aspects, and terminology. You can even print a small rule book that will remind the operators of signal aspects. This will make them feel like they are actually working on a real railroad. Oh, and don't forget to clear out a space for a dispatch!

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By Steve Harvath

I found a brand new, still in the box, MTH Rail King O-scale box car on a sale table. The Feather River Railroad Society was selling a collection of cars they had acquired. There were three MTH O-scale cars in the batch at the Diamond Rails Forever NMRA Conference in Sacramento, California. One of them, a Union Pacific “19th Century”, 34 foot box car caught my eye because I model in O-scale circa 1906. I have been building static dioramas or modules so the models I normally scratch build don’t have to be fully functional.

The Rail King car was shiny plastic with raised lugs for grab irons and brake staff. A modern looking brake wheel graced one end. The siding and roof had raised wood grain detailing that looked good to me. I also liked the lettering and
thought the car had potential to be detailed and aged. I envisioned it as an old, well-worn box car near the end of its useful life.

The first step was to take the car apart. Four screws held the floor and undercarriage in place, and the metal trucks with their O-gauge wheels came off easily once the floor came free. The floor added nice weight to the car, and the trucks had rather good looking side frames. I thought I could salvage the trucks and refine them with new wheel sets and bolsters to match the look and height of my other equipment.

The car had nice doors that open and close, so I decided to add some detail inside. I created the illusion of bracing with strip wood. I drew pencil lines on manila folder cardstock to represent the half walls used on the inside of period wood cars. Some paint and dull coat finished the floor and interior.
With a chisel blade, I removed the raised lug grab irons and the brake staff. I drilled some holes through the solid support brackets for the ends of the roof walk to at least give the appearance of thin iron bars. I also filed down the thick brake wheel bracket. With careful work, I was able to save most of the bolt heads that were cast in place at each end of the grab irons. I used a surgical steel dental pick to reconstruct the grooves between the boards behind the end grab iron rungs and grab irons on the sides of the car. I found an Americana brand paint color called Heritage Brick that was a close match to the molded plastic color. I touched-up the places where I had removed the original hardware.

The car came without any lettering on the ends. I thought I should replicate standard practice. The Union Pacific probably would have had their reporting marks and the car number high up on each end. I applied these letters and numbers using Clover House passenger car gold-colored dry transfer letters and numbers that looked like the rest of the car’s lettering.

The roof walk was another matter. I didn’t feel like expending the energy to remove the existing walkway and replace it. So I resorted to an illusion and put some flat black paint underneath the boards to represent the shadowed gap under the roof walk.
Brass wire was used to form new grab irons and brake staff. A little round bit of styrene represents the brake pawl assembly. An old fashioned brake wheel from Tichy Train Group was fitted to the new brake staff at the correct height above the roof. I represented draft gear with some pieces of basswood and added couplers from Grandt Line. The coupler lift bars are simulated with iron wire and small plastic eye bolts. I removed the original thick truss rods from the underside of the car and replaced them with scale-sized brass wire and plastic turnbuckles. I retained the cast-on brake rigging that came with the car since it is going to be pretty dark and grungy under there out on my railroad.

I took a hack saw to the trucks and removed the O-gauge mountings and couplers. I built new truck parts out of styrene and reassembled the trucks with some wheel sets from a truck kit from San Juan Car Company. I had to use some of their springs to replace the shiny springs that came with the car because they had escaped by jumping to freedom off my work bench.
A coat of dull coat spray went on next. I brushed on layers of brown and graphite acrylic paint. Before these paint layers could dry, I used a paper towel to wipe off most of the paint as if I was staining a piece of wood. I painted the trucks and the undercarriage with the same graphite color and painted the wheel treads on the brown plastic wheels with platinum colored paint. The final stroke was to use a finely sharpened white grease pencil to put some chalk marks on the car sides.
Building A Resin Gondola Kit

More adventures in painting

By Glenn Guerra

I have built a few Funaro and Camerlengo resin kits in S scale and had some fun with them. They also make a few O scale kits, and I thought it would be fun to build one. When Dan was at the O Scale National a year ago in Washington, DC, I asked him to look for one. If he bought it, I told him I would build it for him and do an article.

The kit is a 40 ft nine panel gondola based on a New York Central prototype. All the other New York Central affiliates also had them. Some of these cars had steel floors and some had dump doors. The O scale kit matches a Michigan Central car with four dump doors. Resin kits have a wide range of price and detail. This kit is not expensive. There is good detail on the surfaces that show. One thing I liked was that they included a thin overlay for the interior floor that has all the rivet and door detail on it – a nice touch that you don’t see much on open cars. One of the less detailed parts is the underframe which is a similar concern on most resin kits. The underframes on the prototypes are made of angles, channels, and “I” beams. The shape of the parts does not lend itself well to any casting process. The trade off is to make a really involved underframe with all the correct shapes and therefore a lot of parts. This would take some engineering, pattern making, and casting. In other words, more expense for you and more work to put it together. While the underframe on this kit has no angles, channels, or “I” beams, it does have something in all those locations. What I want here is a kit of a different car for the layout, and I want to have some fun building it. If you want a contest winning model, you will need to scratch build it, kits will probably not do it for you. For my purpose, this kit has what I want – low cost, good detail where it shows, and fairly easy to build.
Before we get to the building, let’s look at some other issues relating to the kit. The casting process is not without quality control issues. As you are casting, the heat from the resin curing warms up the rubber molds and they expand. The resin from the casting material will also swell the molds a little. In the past, I have soaked the mold in mineral spirits to swell it on purpose. The way around this is to cast all the parts at one time and keep them together as one kit. Then cast a second kit and keep it all together and so on. When you get to the last kit for the day, you will find that the parts are not the same size as the ones you cast in the morning. The resin kits I have built had these issues. Nothing is perfect in the world, we just need to deal with it. Know that this is an issue, and think how you will deal with it before building the kit. I will get into more of this later.

One last thing before we look at photos. I have been fooling around with different paints and painting techniques lately and wanted to try some things on this kit. You may have guessed that from the title of the article. The first part of this article will be about building the kit, and the second part will be about the painting and what I tried. Now it’s time to look at the photos.

Many resin kits are cast in one sided molds. When the resin is poured in the mold, a flat surface is laid on the mold to form the back of the part. This keeps the cost down, but does create a few issues with the thickness of the parts. I have some sandpaper glued to some flat plywood as shown. Sand the back of the parts until they are the same thickness all around. Keep checking and go slow. The resin is flexible, and where you put your fingers will add more pressure in that spot. The result is the part will be thinner there. Most of the time I sand until the flashing breaks off the part. At that point, I know I have reached the design thickness of the part.

In many of these kits, they have you assemble the body to the underframe first and then do the details on the underframe. I have had problems with that and generally don’t do it that way. One of the issues with a kit like this that has stamped metal ends is the wraparound of the end over the side. On this kit, and many others, the end is kept thin for casting and appearance. The wraparound part is on the side casting. This means the fit of the end casting to the side casting is critical. If you start sanding and are not paying attention, you will have some problems. More on this later.
As I mentioned before, this kit has a thin overlay to the frame casting so there is detail on the car floor. The frame casting is rather thick on this kit also. I decided to add weight to the car by cutting some slots in the frame casting and gluing some brass bars into the slots. The slots were cut on the table saw and glued in with epoxy.

One of the issues that is always a concern for me with resin kits is mounting the coupler. I don’t like the idea of screwing into the resin. The threads are not very strong, and if they do strip, you are in trouble. The fact that the coupler is screwed into only resin also bothers me. Can that screw hold up to pulling the train or switching? This problem is made worse by open cars like this because the floor is relatively thin. What I have been doing is drilling for the coupler screw, and then countersinking the top of the hole. I insert a flat head 2-56 screw in the hole and epoxy it in place. This gives me a thread that will not strip and a mechanical lock on the coupler connection. I use a hex nut to hold the coupler box to the car. The fact that this car had the thin overlay for the interior made hiding the flat head screw easy.
The next step was to glue the interior floor to the frame. Do not trim any of the floor or frame yet, you will see why in the next photo.

I glued the ends to the sides next as shown. Remember I mentioned the part of the end stamping that is on the side piece of the kit? Make sure the two sides are the same length first. Then check the fit of an end to a side. One hole for the grab iron is on the end casting and the other is on the side casting. When you glue the end to the side, make sure the outside surfaces are flush. You may need to put a little putty on the joint and sand it flush. Go easy with the glue because it will be hard to clean around the details on the casting. This is why I like to glue the body together first and then fit the frame to what the body is. If the frame is not the correct size, the end will overhang the side or be too short.
The basic body is put together. I used epoxy for glue because I wanted the extra strength and the gap filling properties. When you are clamping this all together, some glue is going to squeeze out. I use lacquer thinner and a stiff brush for clean up before the glue dries, making final clean up easier. When you are fitting the frame assembly, take your time fitting it and make sure the ends and sides that are not glued will line up.

I decided to use brass parts for the brake detail since the plastic sprue that came with the kit was not designed for this kit. I have trouble gluing brass parts to resin kits and always try to make a mechanical joint. I use brass wire soldered to the part and then inserted into a hole in the resin.
The end of the car put together. Notice the 2-56 nut holding the coupler on, a good secure connection yet easily removable. The steps and brake platform have brass nut bolt detail soldered into them. These act as pins and make a stronger glue joint to the resin material. The air line is held in place by a piece of wire bent over and inserted into holes drilled into the resin. I use gap filling ACC for these applications and get good results.

Above is the car after painting and decals. I planned to weather the car, so I painted the interior with a rust color first. We will get into the painting more in a bit.
The finished car ready for distressing. Dan wanted metal wheels in the Athern trucks. I had some San Juan Car Co. wheels that I had cast in Nickel Silver a few years ago, so I used them. I turned a piece in the lathe that was a tight fit to the tread of the wheel. The tread has a taper so I was able to just tap it in tight. Now the tread is running true to the lathe. I drilled out the hole in the center next. For insulation, I used some styrene tube. It took a bit to get it all right, but once I did, it went quickly. One thing I had to do was chamfer the back side of the axle hole. The sharp edge was shearing the tubing when the axle was pressed in. When they were done, I polished the tread with the rubber abrasive disk that comes with the motor tools. The polished tread looks good doesn’t it?

Some resin kits tend to be flexible, and this is one of them. Look how the lines of the car are not perfectly straight. Since I wanted to distress this car, seeing the wavy car sides and ends was a bonus.

The finished side view of the car. The monotone colors hide all the details. I have been looking into washes for highlighting details, and wanted to try some things on this model.
Now it’s time for the distressing. This photo is an enlargement of a photo Jack Delano took of the rip track at Proviso, Illinois in 1943. I like to look at his photos, and when I was looking at this one, this car jumped out at me. This is one of the similar cars to the kit I am building. I started looking at the photo thinking about how I could recreate this look.

The first thing I noticed was the whitewash color of the exterior and interior. This car looks like it is in ballast or gravel service. If it was in scrap service, or hanging around steel mills, it would have more of a rust color to it. I also ruled out coal service because of the white. The car has been used a lot in a dusty dirty environment.

Once I decided to try and create this look, I started thinking about how I would do it. One of the challenges is creating distressing that is not a monotone. Look at the tone variation on the inside of this car. I would try to do this using acrylic paints thinned to make washes. I would also try to stipple paint on in areas. Lastly, I would try to put some gravel residue in the car.
I have been looking at the cars that are coming into Plymouth, Wisconsin where I live. Look at the rust on this car. Notice it is not a monotone color. To do this, I would consider stippling on the lighter tones first and then coming back with darker colors.

I took this photo in a scrap yard in Lemont, Illinois many years ago. Look at the tone variation in the rust. This is an effect I want to practice on the model gondola I am building.
If you are trying some new techniques, it’s a good idea to try on some scraps. I painted a piece of styrene with the base color of the rust color on the interior of my model. The photo on the right shows all the tests I made to this piece by the time I was done.

My first thought was to use a sponge. This worked OK, but did not work for getting into corners. When you put down the first color, you should let it dry before the next color. In addition, the stippling must be also, so don’t drag the sponge or you will get a streak. I later found that an old ratty stiff bristle artist brush worked better. Because the brush was ratty and no two bristles were the same length, I could get a better variety of effects. If I lightly touched the surface I would get small dots. If I wanted large areas, I stippled harder. You can see some of the effects I was getting. Lastly, dry the brush or sponge off before stippling. After a few splotches, you will get a feel for how dry to make the sponge or brush.
Here, I am putting on the light base color. You can see how the sponge would not get into the corners well. On the pallet, there are a lot of different colors. I could have mixed more tone variations and more subtle ones. This is a hard thing to grasp for me. If you can see the tone variation, you probably went too far.

In this step, I am putting a darker tone on. On the side of the car I am getting a nice look. The floor does not look too good. Also, I only have two tones here. I think it would have been better to start with the light color and keep adding a small amount of the darker color. Do a little and then add more dark. Do a little more. It’s a little harsh right now.

One last point on color. What I wanted was basically shades of orange. Orange is a very hard color to make. It uses red and yellow which sounds simple. The problem is most yellow paint has a lot of filler which is white. When you mix red with it you get pastel colors and that was the problem I was having. On the next trip to the store, I will see if they have any brighter oranges and reds to see if that helps.
These are the colors I used on the outside of the car. I was told to go very light on the wash. As you can see it, it’s too heavy. I need too work on that

This photo illustrates my point about going too heavy with the wash. This is especially true if you want to photograph your models. This car does not look this bad when you are looking at it in person, but the high contrast of a photo really brings it out. When I made the wash, I put some dish soap in the water and it spread more evenly. To make the dark red rust, I thinned the paint and with a small brush let it wick at seams. It helps to highlight the seams and other details.
I wanted to have some gravel residue left in the car. To make that, I mixed some Durhams water putty and added a bit of color. I made it very thick and stippled it into the corners and around the floor. This was OK, but was a monotone again, so I mixed some lighter color and went over parts of it. Because it was a stiff putty, I got some good texture. However, I don’t like the harshness of it all. Time to put this aside and come back tomorrow.

The next day I made a wash of the sand color and covered the inside of the car. The object was to take some of the harshness of the colors out. When making a wash with these acrylic paints, you need something to break the surface tension in the water. When I made the first wash, it beaded up on the side of the car and I removed it right away. To get it to flow on a smooth surface, you need to add a surfactant to break the surface tension of the water. Liquid dish soap has a lot of surfactant and I used that for this model. It worked OK, but I am going to get some Photo Flo that film developers use. We used that on the ballast at Ted Schepf’s layout. Look close at the photo and you will see how the wash clings to the panel separations on the center sill. This is where dust would accumulate and is a nice effect. The wash also acted as a filter and blended the tones a little. I was feeling better about this after seeing the result.
In this photo, you can see that I was able to get some texture with the Durhams water putty in the paint. In the future, I may add some sand to the mix. I like the more subtle tone the final wash gave the interior.

Here are both sides of the finished car. I went over the sides with a little of the sand color. Again, the photo makes it seem more harsh than it looks in person, but I still need to go much lighter on the washes.
Well, here is the finished model. A little to distressed, but acceptable. I would not want a layout full of cars in this condition, but a few would be OK.

That’s my latest adventure in kit building and painting. It was fun and I learned a lot about painting with acrylic paints.

As for the kit itself, take your time with all kits to see how they go together. Try to anticipate problems by looking at the relationships of the parts. Had I fitted the sides and ends to a floor, I may have really screwed up the corners of the ends. I added the interior braces to this kit. They were there as castings, but were too thick. I scratch built them from .015” styrene and they look a little better. Kits are a starting point; look at them for what you are getting to work with and not what is missing or not so good. Kit manufacturers tend to stick with one technology for a variety of cost reasons. Because of that, this kit came with cast corner steps. I made them out of brass and now they won’t come off. All kits can be jacked up a bit with some modern technology and a few different parts. Take that into account when looking at a kit.

As for the painting and weathering, this was a good experience. I am looking forward to more of this. What I came away with is that acrylic paints can be affected a lot with a surfactant in the water. If it does not do what you want, keep this in mind. It may not be the paint, but just how you mixed it. Go very light on the washes. I have a lot of trouble with this, and will keep working on that. Do your tone changes in slight steps and many of them. I think the results will be better. Lastly, if you want to do rust colors, you need some pure red and pure yellow. Any white in the yellow will give you a pastel orange. Pastel rust is not a good look.

I will be at the O & S Scale Midwest Show in Indianapolis next month. I hope to see you there.
The Story of Adams & Son Model Foundry

The Son Speaks

By Stephen K. Neill

All of the models and castings are from the author’s collection

This is the story of Adams & Son Model Foundry, and also the story of Lindsey Adams, the extraordinary man who conceived it, and then made it happen. The story is very much enhanced through information provided by his son, Gilbert. Yes, he is the Son in Adams & Son; he saw it all unfold, and happily, he is still with us. On the left, are pictures of Lindsey and Gilbert as they appeared in the 1940s.

The common storyline is that Lindsey included “& Son” in the name of the company just to make it sound more substantial, and that his son was too young to make a contribution to the company. But that is wrong; Gilbert was always around his dad’s shop as much as possible, and gradually learned how to do various tasks that were part of the business. Think about it, if you were a young boy in the 1930s and 1940s and your father had a foundry at or near the house making model train parts, where would you be? Even before the business became a full time operation, he had learned enough to really be of help, and he eventually mastered all of the skills necessary to the business except pattern making.

But let’s hear from Gilbert:

“When dad started his model making, I was only 6 years old. By 1939, dad had already built a two person car that was powered by a Indian Twin motorcycle engine and was front wheel drive. I also have a sketch that he had made for another car in 1937. Even though I was so young, I cried when he sold it.

On December 7, 1941 in his shop when Japan attacked the U.S., dad was listening to the radio and he had to keep telling me to be quiet. I can still see that radio.

At this time, his shop was approximately 12’ x 12’ as I remember.

The first train that he built was the 2-4-2 steam engine that I have. It was built of mahogany, white cherry and brass. The number on the side of the cab is 2.3.41. I believe that is the date that he finished it as he always dated everything. At the same time, he had purchased a Silver Streak streamliner for my sister. These were standard gauge. We had a large sunroom where our layout was. This was the only layout dad ever had.

By 1939, dad also made patterns for his double disc sander and lathe head and had them cast and machined. Here again, they have Lindsey Adams, 1939 on them. I still have the pattern for the lathe, his sander, pattern making tools and the chest he made for his tools. I use the sander all the time; my son and I have used the lathe.
I don’t remember what dad’s first product to sell was, but I am amazed at the number of patterns he made. I have a few patterns, with the “Pilot” being my favorite as it is made of so many pieces (around 98). I have a door knocker made from the cab of an O scale diesel. I also have a silhouette of an O scale unit that was used on top of our mailbox after we moved to Wichita, Kansas.

While in Texas, I told dad that I could mold a flatcar frame, which I did, and dad shipped it off. I was 9 years old. At the time, our molding flasks were about 14” long. After moving to Wichita, the flasks were about 18” x 12”.

After we moved to Wichita, I was 12 years old and can remember the following. The first plant was a large double car garage that was used as the foundry and core making room. Cores were made with a coarse sand and linseed oil and backed. The cores were used to make things hollow. The molding sand was fine enough to cast your fingerprint in it. On the back of the foundry was an area for the furnace where we melted the brass and aluminum for a pour. When I was there it was my job to see that the brass or aluminum was heated to the correct temperature. (Brass 2,000+) This area could get to 114ºF in the summer. During a pour, weights had to be placed on the top (Cope) to resist the pressure from the poured metal. The bottom of the mold was called the Drag. On a pour it took two men, one had two handles while the other had one. Each ladle held about 2-3 gallons.

An addition was added for the pattern shop and office. In the pattern shop was his 10” and 14” band saw, 24” jigsaw, the wire brush and grinder motor, all which I still have. You had to be careful when you were wire brushing parts and not brush to hard and remove the fine detail. Remember our molding sand was real fine. The plant was on a lot that extended to the river. During a flood stage, we had to watch the rising of the river because if it got too high, we had to get the sand up.”

Many of you reading this will have some familiarity with the company, but some may not. Though their products live on, the company went out of business more than 60 years ago. And while some of the patterns and fixtures were passed to others and still exist, there was no successor company. So a brief introduction seems in order.

Lindsey Adams started making model train parts for himself in 1940, and then for others on a part time basis. The business grew, and in September, 1946 Adams & Son Model Foundry (A&S) became a full time business. It continued until February, 1951. In that relatively short time period they supplied the castings that enabled thousands of engines to be built. They are best known for diesel engines, but they also produced what were called casting sets for steam engines. While they did sell directly to the modelers of the period, they mainly supplied castings to over 30 manufacturers. Perhaps this is why, given their impact on the O scale hobby, over the years there has been less written about them than some other O scale manufacturers.

Lindsey L. Adams was born on January 19, 1911 in Hutchinson, Kansas; he had a sister and two half-brothers. He graduated from high school in 1928, and had a year & a half of home study in mechanical drawing. From 1928 until July, 1935 he operated a foundry and pattern making business in Wichita, Kansas. His step father-in law had a foundry business nearby. His son Gilbert was born in 1934; a daughter Pat was born in 1936.

In July, 1935, he went to work for Sparton Aircraft Company in Tulsa, Oklahoma doing layouts, templates, making small jigs and fixtures, and pattern making. Then from April, 1936 to September, 1946 he worked for Bethlehem Supply Company; at first in Tulsa and then in Corsicana, Texas.

He pretty much always had a foundry shop at or near his house where he made things for himself and others. In Corsicana, it was only about 12’ x 12’, but by 1939, he had designed and built his own disc sander and lathe using patterns and castings that he made. He also built a two seater car powered by an Indian Twin motorcycle engine, and it was front wheel drive!
See the picture below; that is Lindsey behind the wheel. The drawing is for a second car, done in 1937, that he designed but didn’t build.

Model Railroading was a hobby for Lindsay, and in 1940, while still employed full time, he started making his own model railroad parts. Others saw them and asked him to make some for them. In 1941 he completed a model of a 2-4-2 steam engine for Gilbert. It was made of mahogany, white pine, cherry and metal. He still has it (see picture bottom of page). His sister Pat had a model of the Silver Streak streamliner. They were standard gauge and ran on a layout in a sun room of the house.

At Bethlehem Supply Company, Lindsey had worked his way up from Patternmaker to Foundry Methods Engineer, etc. In 1942 & 1943, he completed, on an extension basis, ESMDT Texas A&M College courses in Industrial Safety Engineering and Advanced Engineering Drawing, and also taught a course in Foremanship & Supervision. Later, he became an Assistant Superintendent and then Safety Engineer for the plant. This is the job he quit in September, 1946 to run Adams & Son Model Foundry full time.
Shortly after this, he and Gilbert, with the rest of their family, returned to Wichita, Kansas.

Between 1940 and September, 1946, A&S had grown enough to warrant an ad in *Model Railroader* magazine (MR), and to attract the attention of nationally known producers and sellers of model railroad equipment.

The first A&S ad in *MR* appears on page 453 of the July, 1946 issue. It is pictured below. Note that it says “Try Your Dealer First”, indicating that their items were available direct or through dealers.

In that same July issue, in a full page ad on page 465, Dallas Modelcraft, primarily an HO dealer, says “THE FAMOUS ADAMS CASTINGS FOR THE O GAUGE SUPER CHIEF are still available.” Their ads going back to the April, 1945 issue had listed the castings without saying they were made by A&S. As the ad is a full page, and is devoted mainly to HO items, it is not reproduced here. It announces an EMC Freight Diesel in HO, and says “Patterns and castings for this beautiful job were produced exclusively for DALLAS MODELCRAFT BY ADAMS & SON MODEL FOUNDRY. We are willing to state, without fear of contradiction, that the bronze and aluminum sand-castings produced by this firm for model work, are not equaled by anyone else in the U.S.” This is one of a number of examples of a model railroad company wanting to make sure that customers knew that the castings in their products were made by A&S, and that they were the best in the business. And yes, A&S did make some HO castings.

These ads show that Dallas Modelcraft was an early customer of A&S, and taken together, illustrate that some, but not all of the A&S products, were available directly from them as well as through their dealers. A month earlier, in the June issue of *MR* on page 408, an ad for Harry J. Garrett & Co., also of Dallas, Texas, shows a picture of an A&S casting kit for $25. This is the first ad showing the castings that make up a kit for an
A&S diesel. That ad is shown below. Note the contents of the kit, and the announcement that they are the “Exclusive National Distributors” for A&S. Harry J. Garrett & Co. was a distributor and wholesaler, for a lot of companies that made model railroad equipment.

Note that there are no sides in the picture. It is helpful to remember that Adams & Son Model Foundry was just that, a foundry. It was left to the modeler to make the sides from sheet brass; a much easier task for the average modeler of the time than making detailed castings. Later, Dallas Modelcraft and others offered sheet brass sides along with the castings.

The picture at left shows some E units painted for the Chicago Northwestern. It is believed that they were made from the castings as shown in the Harry J. Garrett & Co. ad, and that the sides are the ones that Dallas Modelcraft offered.
In a November, 1946 ad in *MR* on page 770, The Hines Lines Co. of Detroit Michigan and Windsor, Ontario says that Bill Lenoir is doing the patterns for their Mikado, and that A&S does their castings. Note the praise for A&S.

Another early customer of A&S was Bob Smith of Central Locomotive Works (CLW). In 1946, Bob had spoken with an executive at Santa Fe about doing some work on the Santa Fe layout at the Museum of Science and Industry in Chicago. The executive asked Bob to build him a model of their E6 diesel. Bob took measurements from an actual E6, went to A&S for castings of the nose and truck sideframes, and built the body out of brass sheet.

The executives at Santa Fe were very impressed with the model, and apparently spoke to American Locomotive Company (ALCO) about it. ALCO was building the first PAs at the time, the first new engine after WWII, and Santa Fe was to be their first customer. A couple of weeks after Bob delivered the E6 model, he was asked to return to the Santa Fe offices where the president of ALCO asked if he would build models of the new passenger diesels that were then under construction for Santa Fe.

This time Bob worked from ALCO drawings, as the real ones were still being built, and once again went to A&S for the castings for the nose and sideframes. They had a very tight six week timeframe for the work, as the models were to be part of a gala ALCO/Santa Fe banquet at the Waldorf Astoria hotel to celebrate the introduction of the engines. This was a very big deal; they even punched a hole in one wall of the hotel so that the nose of one of the engines could be on one side of the stage.
Bob then decided to produce them for the model train market, and worked with A&S to get patterns and castings for the ends, roof and sides. These are the ALCO PA/PBs that CLW sold for many years, eventually selling 400 sets of the castings. The first CLW ad that mentioned them was on page 54 of the January, 1947 issue of MR; it used a picture of the engines that had been made for ALCO/Santa Fe, and is shown below. The first CLW ad offering them was in the February, 1947 issue of MR on page 170. It said “Our castings are made by Adams & Son Model Foundry which we consider ‘enough said’ as to their quality.”
The picture on the previous page of an unpainted set of PA/PBs shows what the castings looked like. The picture above is of a set painted in the Santa Fe scheme.

As mentioned, A&S also made castings for steam engines. You could buy individual castings or you could buy what was called a casting set. It was just that, a set of castings. It was not a kit as we know today. It did not include everything you would need to build a locomotive, such as drivers and wheel sets or a motor. The hobby was a lot more do it yourself in the 1940s. It was understood that the modeler would select the drivers, motor, etc. that they preferred. Again, A&S was a foundry, and they produced parts and casting sets for several steam engines.

The picture on the left is from a CLW ad on page 339 in the April, 1947 issue of MR. It shows a casting set for a NYC Mikado that has 52 castings. It is not identified as an A&S product, but it was, and it was available directly from A&S and from other companies.

Also pictured on the next page are two steam engines made from castings done by A&S. Their tenders are not pictured as they were not made from A&S castings.
With respect to tenders; the following series of pictures show A&S castings for a Vanderbuilt tender. The first picture (left) shows two sets of the castings so that you can see both the front and the back of them. Note that not all of their castings are marked as A&S.
The second picture (left) is of a set of the castings assembled. It was left to the modeler to cut two pieces of sheet brass to fit, and to impress rivet heads in them.

The last picture below above is a completed tender body. The modeler did a very good job on the sides, wire grab bars, etc. While not visible in the picture, the backs of two of the castings have Adams & Son Model Foundry Corsicana, Texas in raised letters. Note in the picture of the individual castings, none say Corsicana, Texas. The castings seem to show traces of where that lettering was removed from the patterns.

Part 2 of this article will review the products made by A&S for the various manufacturers, and for sale directly and through their dealers. So stay tuned!
A New Control Technology for the future “you” can help develop and,
Remembering some of the great modelers from the past who many of us wish
we could have had as our mentor, and a few surprises along the way.

Great News: WiFi Model Railroad LLC Announces
WiFi Control for O Scale is Coming and
You Can Be a Part of Its Development

Awhile ago I wrote a brief article about a new control solution that is based on a WiFi connection via an
Android device. At that time, the control solution was only available commercially for HO. To refresh your
memory I wrote: “I talked to Peeyush Garg, who is one of three partners that own WiFi Model Railroad LLC,
about their new WiFi control solution using an Android device (iOS version coming soon) and their app for our
Train Control. I think they are really onto something. Their solution allows the control of a D.C., DCC, or Dead
Rail unit, or a combination of motive power units to be controlled on the same layout. So a D.C. will be able to
run on a DCC layout. In effect with the WiFi solution you may no longer need DCC. I wish it was available for
use with our S or O Scale units but it is not. It is only available in HO Scale at this time. But according to
Peeyush it is coming to S and O Scale. I suggest all of us keep track of its development. I plan to Profile the
Company when Peeyush tells me he has tested the larger units and is ready to bring it to market. Thanks
Peeyush for your interest in bringing this new technology to model railroading.”

I recently talked to Peeyush, and am pleased that he has had inquires from O Scale modelers from my first
article; and based on these comments and inquires the WiFi Model Railroad LLC wants to investigate designing
a production unit specifically for O Scale modelers.

I am pleased to be able to announce this decision and hope you will take a hard look at their new technology
when it becomes available, which I think could revolutionize how we control our model railroads.

In order to get their O Scale unit and app development underway, they have agreed to offer a contest to
enable one O Scale modeler to win one of their existing HO systems along with mentoring to make sure the unit
will be appropriately used for the operation of an O Scale locomotive that requires no more than a 2 Amp motor
(3 Amps including onboard electronics). The winner, in turn, will become a consultant to the company in
developing its WiFi O Scale solution for production. The winner will also receive a free O Scale unit once the
testing is complete.

What I think is great about this contest is that there are no losers. All O Scale modelers who enter the
contest will receive a special email address for Peeyush to advise him directly about the specific features they
believe the O Scale unit should have to be most useful to O Scale modelers. Also, each modeler entering the
contest will receive a special advisors discount of 20% off the price for one of the O Scale Units when they are produced. What a great opportunity for all of us to have direct input into bringing a new cutting edge motive power control solution technology to our O Scale railroads.

Specifically the questions that Peeyush told me he needs addressed, by Advisors, for their O scale product are:

- What is the max amperage in O scale?
- Maximum number of possible motors (current rating per motor).
- Preferred number and types of function outputs.
- Maximum size
- Optimum sound output power and number of simultaneous channels.
- Any other comments, or operational suggestions which should be considered for an O Scale unit?

He also told me: “We are customer driven from the very beginning. We try to take customer feedback at every step of the way to guide ourselves. This (the contest) is a great way to achieve that. I thank you for coming up with this idea and getting it across to your readers. Nothing better can come out of it than the entire modeling community collaborating on the effort.”

Originally Peeyush had asked me to answer questions about what O Scale modelers would want in a WiFi control unit for their railroad. Rather than me doing that, or asking another modeler I could recommend to help, I looked for a way to get all of you, our readers, involved. I discussed a contest idea with Dan Dawdy, the publisher of this magazine, and then suggested to Peeyush getting my readers involved in the units development through offering a contest. The contest I outlined above grew out of those discussions.

I asked Peeyush to provide a detailed overview of their WiFi HO solution, and the technical requirements for its use in appropriate O Scale motive power. Please remember that the unit that will be initially provided to the contest winner was developed for HO use and is provided here with certain limitations noted for O Scale modelers. This HO unit is not being marketed at this time as a O Scale control solution, but is offered here to the contest winner to get expert actual O Scale Modeler input in what needs to be changed in the HO unit to make the unit operational for O Scale modelers. The following information will address the two specific questions I asked Peeyush which I believe will convince you of the importance of this new technology.

Why WiFi?

WiFi leverages powerful infrastructure already found in your home and the computing power in your hands (aka smartphones). Almost everyone has a WiFi access point (commonly called as a router) in their home or club layout. Almost everyone has a smartphone or tablet with them, which is essentially a powerful computer first and then a phone (most tablets do not even have the phone capability, just pure raw computing power with a nice graphical user interface). For those, who don't have one or both of the above, an access point (no Internet required) can be had for less than $50 and an Android based smartphone for less than $100, which is still less than most traditional handheld controllers (and even some DC power packs!).

WiFi is itself a protocol, a widely accepted, IEEE standards based, robust, powerful and secure that was invented to replace wired Ethernet. We don't have to re-invent the wheel with more standards. More standards means more compatibility issues and resolving them comes at added costs. The "custom" standards often have associated "custom" (read expensive) equipment. Being TCP/IP based, without worrying about lower layers in the stack (e.g. how to send the radio signal), you can have your custom protocol implementations on top of the stack if really needed.

The WiFi advantage:

- Wireless. No wires. If you plan to provide power through the track, a simple DC power pack is all you need.
  Using battery to power allows for deadrail operation.
● Direct. No intermediate devices.
● Bi-directional
● High bandwidth
● You never lose control. Being wireless control, it doesn't matter where the power comes from. As long as the locomotive is powered, it can be controlled.
● ANY smartphone or tablet (that is WiFi standards compliant which includes almost ALL) is a throttle
● Lets you use power source of any kinds without having to worry about control (or even losing it). You can even use battery.
● Opens the door to WiFi compliant devices to be part of the ecosystem e.g. signals, turnouts, all kinds of sensors/detectors, or even any other IoT device (e.g. your IoT enabled coffee machine).
● All IoT devices can inter-communicate directly to each other. Of course, a central control can be implemented if desired.
● Possibility of operating a layout across the world remotely (as it seamlessly plugs into Internet).
● And many more possibilities!

What is the LocoFi™ advantage?:
● Customizable sounds. Even third parties can contribute to the sounds.
● The sounds reside on user removable microSD card.
● Being graphical user interface based, there's no need to remember any CV programming codes. User friendly interface takes out the frustration of programming leading to more time and fun towards running trains.
● Not only can you use any smartphone or tablet as a throttle, we use smartphone or tablet for almost everything everyday. Some people say smartphone is not for train control. We say, why not?
● Same hardware keeps upgrading with single touch "OTA" updates.
● Already familiar with smartphones. No learning curve. In fact, kids run trains during our train shows.
● Prototypical. Prototypical operations is at the heart of LocoFi™. Fine motor control with excellent slow speed.
● Wide voltage range. As low as 9V or as high as 24V.
● It was conceived "ground up" without even looking at any other system out there.
● Very little known secret is that you can write your own system on the same hardware!
● More power in the hands of the modeler. Customizing sounds for example opens up another aspect of the hobby just like electronics, scenery or trackwork while giving you control at the same time.

Current technical specs of “HO” DDLLHA:
Input Power Type: Clean (NOT pulsed) DC, DCC or battery
Input Voltage: 9V - 24V
Current Rating: 3A (2A motor)
Motor Operating Voltage: Same as input voltage
WiFi Spectrum: b/g/n (2.4 GHz)
Smart Devices Supported: Android
Dimensions: 3.44” (L) x 0.67” (W)
Speaker with enclosure: 8ohm 1.5W; 1.02” (L) x 0.59” (W) x 0.27” (H)
Sound Scheme: Diesel; 8-bit 16kHz; .WAV; 3 channel polyphonic; stored on pluggable microSD to easily load custom sounds
Supported Sounds: Engine Startup, Idle, Shutdown, Horn and Bell
Skill Level: Basic soldering skills
Lights: Front and Rear, LEDs, On / Off, 10mA max on each output; resistors onboard
Other: Onboard capacitor for typical dirty track issues
Product Weight: 0.5oz
Shipping Weight: 3.5oz
How to enter the WiFi Model Railroad LLC contest drawing

To enter the drawing, you must fill out this form. Every O Scale Modeler who enters will receive a special email for Peeyush.

The form will require, your name, address, telephone number, age, statement you operate O Scale locomotives on your own or a club layout, confidentiality agreement covering what you learn about company technology, agreement, if you are the winner, to test HO module according to instructions, and mentoring by company representative, and agreement to provide help to the company in designing an O Scale production module. The contest will begin at the time of the publication of this article and close on or about September 25th, 2019. All modelers who enter this contest will have their emails provided to the company so the company can communicate directly with them through their newsletter or to get the modelers input and update the modeler on the developments of future O Scale control solution.

I hope you will participate in this effort to bring a new technology in Model Railroad control to O Scale. Thank you, Peeyush of WiFi Model Railroad LLC, and to Dan Dawdy, Publisher of this magazine, for supporting this effort to have our O Scale readers have a direct input in the development of this new O Scale control unit and app. Please say thanks to Peeyush and WiFi Model Railroad LLC, and to Dan Dawdy, Publisher of this magazine, by supporting the contest and this magazine.

If this contest idea works, as I personally believe it will, maybe other manufacturers will decide to solicit our readers input on new product development in a similar way. If other manufacturers are interested in discussing this program please contact me at jimkellow@oscaleresource.com. Good luck to all O Scale modelers going down some more “New Tracks”.

Now let’s turn to remembering some of the great modelers of the past who helped develop our model railroad hobby to what we enjoy today. As you will see some modelers are doing more than just remembering they are working to recreate some of the magic of the past modelers back to their Model Railroads today.

John Allen (The mentor I never met but wish I had)

One of the great regrets of my life is that while living in Sacramento California in the late 1950's to early 1960's was I never took the initiative and tried to visit John Allen and see his layout. As I look back on those years, yes I was an HO model railroader, and yes, I knew about John Allen and his wonderful layout, being young and in the military at the time, seeing his layout in person was just not a high priority for me so I did nothing to try and see it. How dumb of me!

While I never met John Allen, I do consider him to be the person who was my first and is my forever mentor. He most influenced me to become a model railroad builder and not just a model railroader. He was, without my even knowing it, my first mentor. He has truthfully never left my side all these years. I feel his presence every time I sit down at my work bench. His photos and articles made him a great teacher for me, and has guided my model building to what it is today.
Now, in my retirement, I realize that the feelings I got from looking at and studying his published photos encouraged me to want to build models. I continue to build many models in the hope that one day one of my models will come somewhere close to looking as good as John’s in his photos. John Allen’s photos pushed me toward increasing my confidence and improving my model building skills as sure as if he had been standing behind me and shoving me along.

Oh sure, there have been other modelers who have been outstanding model builders who have been talked about and published, but there has, at least to me, always been that extra something that John Allen had and brought to building his models. Every time I look, even today, at one of John Allen’s photos it is as if I am looking at a real life picture of a real life railroad scene. Only a true creative artist, talented photographer, and master craftsman can capture such feelings in their modeling.

I must admit that in many ways John Allen pushed me to join the NMRA and obtain my MMR. Thanks John for the push in this direction as it has opened up “New Tracks” for me to travel, new friends to make, and many new skills to learn about how to build and detail a model.

John Allen is still pushing me today. I started writing this “New Tracks” series of articles on mentoring because I am concerned that unless the artistry and skills of model building are passed along to future modelers by the highly skilled, highly motivated, enthusiastic model builders of today, we stand a chance of losing the knowledge and abilities that have made model railroading the great hobby it is today. I believe John Allen will continue be a mentor for future modeling generations as long as he lives in the minds of those modelers who read his articles and see his photos.

I encourage everyone who reads this article, if you have not done so already, to read John Allen’s articles, see his photos, listen to the stories of those modelers who actually saw his railroad and hopefully have him become one of your mentors. To this day, as strange as it may sound, I feel the presence of John Allen’s ghost every time I sit down at my work bench to build a model. When I finish a model, somewhere in the back of my mind is the question “Good enough John?”

I have found I am not alone in my feelings about John Allen’s modeling. I recently got lucky and found a modeler who is recreating John’s “Gore and Daphetid” railroad in its original magnificence as it looked at the end of his life.

I want to introduce him and also start a new part to my mentoring articles called “New Wizard’s Bits” which will talk about what this modeler, Randy Lee Decker, is learning about John’s railroad construction and artistry from recreating his model railroad as it looked before the fire at John’s home took it away from us forever.

Randy is giving us a second chance to see what a recreation of the original might look like and what secrets Randy’s efforts may reveal. I hope you enjoy hearing Randy’s “New Wizard’s Bits”. By the way when I suggested doing the Bits to Randy he said: “Interesting.. Yeah.. I could do that.. John Allen is amazing, the stuff he has me doing to try and copy his work is extensive. Perhaps we could call it New Wizard bits..... because I will have a lot of fun little observations to throw at people... Worth looking into.. I am so glad to see anyone keep John Allen's name in print. Nice to see your shared enjoyment of and understanding of his importance even today on the model railroading world.” Thank you Randy. Then he sent me his first Wizard Bit:

Wanna Wizard bit...?; “Stock up on every scale size structural shape you have in the bins, fill the glue bottles and check your paints and cleaners cuz yer gonna need it all. Chasing after John will have you tapping every tool and into the bottom of every supply bin you have. And I am just getting started.
Like many kids growing up in the 1960’s, I liked trains. I had a pile of brass HO track sections all hoarded into a box that I would connect together from time to time on the spare room floor in our family home. Mindless loop after mindless loop was run with expert control using the power packs throttle and directional switch to run the greatest engine ever built in my little world; a Tyco 4-6-0 AT&SF steam engine, back then, my pride and joy. Fortunately, this introduction into the world of model railroading was short lived. As one day when I was eight, in 1969, my dad brought home a magazine all about model railroading.

There was a nice photo of a sea port and some tall industrial buildings and a railroad that ran near the water on the cover that looked intriguing, so as I thumbed through the pages to see what this was all about, I had my young mind blown by incredible advertisements for highly detailed kits and rolling stock, buildings and accessories the likes of which I had never seen before. I also saw, for the first time, the incredibly detailed imported brass engines and an endless stream of building techniques and ideas from what seemed an endless list of expert modelers and my world totally changed on that day.

I was already totally hooked and my mind was awash by the time I came to the article about the railroad by the sea. Now I could probably just end my little story right here. I’d bet 99% of the model railroading world of any age are already right here with me, and remember doing exactly the same thing and remember the day their model railroading world changed. What John did for me, and for a vast audience of people who were interested in the hobby, or even some who, perhaps were not, was to present a panoramic scale world that was so complete that you were fooled, even if only for a short time, and for those if us not used to looking at things, or realizing the endless possibilities of viewing things “in scale”, this aha moment simply snapped the light on for us. From that time on, I viewed everything differently.

During family trips, I saw everything with new eyes. I now saw the dirt and clutter and junk piled near an old, rusted anchor fence around almost any industrial building of any size. And because of John Allen's attention to realism and details, I looked more closely at the trees and the color of rivers, and I even looked at small plants and rocks “in scale” and, for the first time, I came to understand terms like prototypical and weathering. I buried myself in the other author’s articles about techniques and ideas. John showed me how real a scene could appear from just a few feet away when you applied just a few of these new techniques. I began practicing as diligently as I could and have not stopped learning since that time. John proved, time and time again, how a scene can be made to be very realistic but then go a step further and make things “come to life” with the application of scale people, or animals, all doing everyday ordinary things, and sometimes adding a simple dose of humor to create something a viewer will remember and something that was now unique to that modeler.
So my enjoyment of this hobby has continually advanced with my knowledge and skills all because of my early exposure to the incredible fantasy world of the Gorre & Daphetid lines and the possibilities of this great hobby on full display. I have been lucky enough to have lived my life as a craftsman and professional model maker, cabinet maker and to apply a host of other professional skills to earn a living. My work is always of the highest quality. I have always held myself to the same high standards John Allen taught me to strive for. I have retired now, after a lifetime of work in the building trades as a master finish carpenter, and then later as a Museum Exhibit Specialist. I can directly attribute a good portion of my livelihood to the creative wisdom and creative excellence that John Allen brought to the model railroading world and my admiration for John is right up there with my own father who was a master carpenter himself. So now it seems my talents and my life have come full circle.
In the Spring of 2018, I began some additions on the space I had saved for a model railroad one day. I found I could actually fit, and I want very much to recreate the Gorre and Daphetid in its full glory and bring every trick I had learned and new product out there to this project. My passion now is to resurrect the G&D Lines and “from the ashes” bring this incredible masterpiece that was taken from all of us so long ago back to life. In January of this year (2019), the space had been readied, the interior finished, ceilings painted, lighting mounted, a valance and a backdrop installed and painted and the benchwork and model building has now begun. The “Great Divide” is underway.

I have a small Facebook page where people can stop in and follow the progress. [https://www.facebook.com/Great-Divide-Lines-423511918192732/?modal=admin_todo_tour](https://www.facebook.com/Great-Divide-Lines-423511918192732/?modal=admin_todo_tour)
I have met and am working with some real John Allen experts and even some friends of John Allen's who knew first hand John's Layout. The response, in general, from everyone has been totally supportive in every way. I will have links on my page to some other fantastic sites that hold some incredible things to see from the original layout and there are other sites on Facebook and IO groups dedicated to John Allen's legacy you really should see as well.

I truly have been under the influence of a Wizard “The Wizard of Monterey” The whimsical title that John Allen’s friends bestowed upon him.

Randy Lee Decker aka “The New Wizard”. You can email Randy at Randy.Decker@oscaleresource.com.

Then I found another modeler, Boyd Wirkkala, who is building what he calls a “Revival” of the Gorre and Daphetid, based in Washington state.

Thank you so much Boyd for your help in helping me focus this article. I hope you will also share your modeling of your G&D revival with us as you build your Gore Northern.

**Boyd Wirkkala** Owner: Gorre Northern: A Gorre and Daphetid Revival
I am 62 years old and live in Nemah, Washington. My introduction to model railroading began when I was young. My older brothers had Lionel trains which I enjoyed watching, but it was the magazines I found stashed in their closet which captured my imagination as a young boy of ten, particularly the 1966 volume of *Model Railroader*, some older *Model Trains*, and a few other magazines. In these issues were stories of what grown up men were doing with model trains and, although they were having fun, it was serious business, and they gave me my introduction to the hobby. I soon received my own train set, a Tyco freight train headed up by a Mikado 2-8-2. Lynn Westcott's "HO Railroad That Grows" became my inspiration. I taught myself to build things as a kid working with my Dad's tools and following my imagination. I scratchbuilt a small freight station from the Kalmbach book "Small Structures You Can Build" out of balsa and cardstock which included a working derrick controlled by fishing line from under the table.

The first time I saw the name of John Allen was in the March 1966 MR article "Timing and use of clock in operation". The idea didn't mean much to me then, but I liked the pictures. The revelation came to me when I bought Bill McClanahan's scenery book and I saw that big picture of French Gulch from the Gorre and Daphetid. Not long after my interest in the hobby went dormant as I became involved with all the things teenage boys were into in the early 70's.

I subscribed to *Model Railroader* in 1976, and watched the hobby from afar with great interest. When Westcott's book about the G&D came, out I bought it in 1983. It was then that I learned who John Allen was and what a magnificent railroad he had created. I had never seen a track plan of the G&D and now I spent hours drawing plans to see if I could fit it into an old shed at the rental home where I was living. Children, and family, and life with all its good and bad came along, and the big dream was buried once again. Eventually, the stacks of magazines went to the ash heap but I could not part with that John Allen book.

Fast forward to 2015: After years of working on many household, homesteading, and artistic projects together with my wife Judy, she asked me "what do you want to do for yourself?" I said, "I want to build a model railroad", and that railroad was John Allen's Gorre and Daphetid. I spent weeks drawing a G&D trackplan that would fit in the 16' x 38' stick-built shop building next to our home. Room prep and painting turned a dirty old shop room into a usable space for the Great Project. It wasn't until December, 2017 that a real start was made and work has continued since then. As of March, 2019 the benchwork is done, roadbed in, and 20% of the track laid.

*The first train on the Gorre Northern coming up the grade from Port on super-elevated curve. Track is Atlas glued to cork roadbed with clear silicone caulk.*
Articles in magazines and online taught me model railroad skills, and I have never personally met another model railroader. I have chosen HO scale because I want to build a large rail system, but also want detail. Almost all the articles I have learned from were about HO scale and then, of course, the G&D was built in HO.

I only recently learned about Frank Ellison and his great Delta lines. I really like his idea about the model railroad as stage and the trains as actors. We are not truly recreating reality when we build a model pike, but a stage for our models and imagination to run on even as the theatrical is not exactly like a real room, but sets the scene for the players. I loved Whit Towers’ Alturas and Lone Pine and have great admiration for the V&O of Allen McClelland. It was John Allen’s work that taught me all that a model railroad could be. Like many other pikes, it was a transportation system in miniature, but it was much more than that.

The G&D was a canvas for John's artistry, with a paintbrush and as a sculptor of geologic forms, and even the human form itself... those scores of truly lifelike human figures added another layer of realism and purpose to John's scenes. His true to life lighting system was designed with his camera and specific film in mind and it was those color transparencies that actually was the final canvas that brought the Gorre and Daphetid to the world.

One of my favorite quotes from John Allen is "There is a little thing called imagination which must play an important part on any model railroad." I would say there is a necessary suspension of disbelief which is needed...
for a truly fulfilling model railroading experience. On the G&D, Great Divide and Port are physically connected, but in concept are many miles apart. Port is a seaport at sea level, but on the layout is fifteen inches higher than the mountain river town of Squawbottom. No matter, the imagination makes it all work. It is this imagination working with the physical structure that can bring a 4’ x 8’ oval or a larger dog-bone layout to a satisfying level of enjoyment. There is some whimsy in John's scenes and even in his geology and it is a reflection of the builder.

One of John Allen's greatest gifts was the ability to "see" as a photographer and artist and builder of miniatures. This enables one to choose what is right for a scene and weed out those elements that do not fit.

My own work in painting and study of nature has taught me this and I trust it will be valuable in building my model empire. Almost anyone can put up benchwork, lay good track with the products available today, and construct basic scenic forms, but it is those later layers of detail that brought the G&D and any great pike to life. The dream and desire must come from within as it did in John Allen's case; and if the dream and vision of a world in miniature, on the benchwork AND in the imagination, is allowed to die, so will the hobby.

My project, the Gorre Northern: a Gorre and Daphetid Revival, is set in my state of Washington. There was challenging railroading as the Great Northern and the Northern Pacific crossed the Cascade Mountains. In my world, the G&D went into partnership with these two great lines as the Spokane, Portland, and Seattle was a
joint venture. My main goal has been to run trains on the G&D, and to that end, nearly every track feature and turnout of the G&D will be included on the Gorre Northern. Most of the scenic forms from Scalp Mountain to Devils Post Pile, French Gulch, and the river gorge at Squawbottom will be modeled. My final layers may look different than John’s, but my pike will be recognizable as a form of the G&D. I would like my work to be an encouragement to new modelers both young and old........just step out and try it..... you can do far more and better than you realize. I have virtually no modeling experience, but I do have the belief that what one person can do so can another.

If you believe I can help your modeling please contact me at Boyd.Wirkkala@oscaleresource.com.

Boyd is another modeler I wanted to hear from about his experience the same as I wanted to hear about Randy’s experience. What is it like to be able to create a Revival of the G&D? So I asked Boyd if he would also keep us informed about his modeling experiences in building his G&D Revival. We agreed to call his comments “G&D Revival Notes”.

I think hearing the comments of Randy and Boyd as they build their G&D models of John Allen’s original railroad will help us understand what a magnificent effort John Allen put into creating the original G&D.
Pat Turner

Pat is a modeler who remembers John Allen and created the Gorre & Daphetid Facebook page. This site lists many photos of John Allen’s layout. http://gdlines.info/G&D_links.htm#MR_1956_Jan

I really enjoy reading the comments from modelers on the Facebook “Gorre and Daphetid” page who were influenced by John Allen. Here is one comment from Pat Turner that I think you will find interesting. No doubt in my mind that Pat can be a great resource for us to use in getting to know John Allen and his modeling.

Pat told me: “I first learned of John Allen and the Gorre & Daphetid at the age of 14 in 1981 when my uncle bought a copy of the book; "Model Railroading with John Allen". I borrowed it from him and he ended up buying another copy for himself as I read it so many times the pages were loose and corners folded.

I was amazed by the photos and read the text over and over. I then started looking for other info on him and his railroads in magazines and books. I collected everything I could find. I bought all the MDC/Roundhouse cars in HO. I then got the NMRA G&D cars in all scales. I then bought most of the other G&D/DG&H cars I could find in other scales. I bought the Fine Scale Miniatures kits for the John Allen Special and the #210 Icing Platform. There were still other kits from other people that I also bought. My sixth HO model railroad was 4’x8’
The photo above is on the same module as the previous page. This time MDC #12 is passing through town and everybody stops what they are doing to watch and wave as they go through town.

The picture above is on part of my layout. I built the engine from a MDC G&D kit. The gondola is also a MDC built kit. The box car is a MDC #211 Ventilated box car that has converted to a regular box car and had the number changed to #21 with some light weathering. The caboose I bought at a swap meet and its history is unknown.
person as he died when I was only 6, I was considered by many to be an expert on at least the history of rolling stock, engines & kits that had been released since his passing. This came as a shock to me, yes I did have a lot of models and kits, but I just did not realize how much I had until then. Of course, I also had a good general knowledge of John and his railroads, but at the time there were many people still alive that had met John in person. There were six of us that put together the four CDs and one DVD for the Project. We never all met each other, but talked online and by phone often. I did know Peter Prunka as we both lived outside of Atlanta, Georgia. I on the south side and Peter was on the north side.

Peter was the driving force of getting the CDs & DVD done. We all helped on the website and it is now back up and running. The story does not stop there, as I moved to Facebook and started a Gorre & Daphetid group there also – it now has 370+ people on it. John still continues to influence my personal modeling every day. I have recreated many of the models John had for use on my personal HO railroad. From the C.D. Grant to the #12 to the Shay to the #43 and more including freight cars, cabooses & passenger cars. I continue to model what I have loved since I was 14, The Gorre & Daphetid!"

If you think I can help you please contact me at Pat.Turner@oscaleresource.com.

I hope that I have been able to give you an understanding of how some of us feel about John Allen and his contribution, not only for our modeling, but also to the hobby of model railroading. I do not believe the hobby would be as great as it is today without his contributions. Will we ever have another modeler who can match his skills and artistic abilities? Not so far, in my opinion, but maybe someone will in the future. We can only hope.

In the meantime, I truly hope all of you keep model railroad building. You never know what you will accomplish unless you try. Unless you try, you will never feel the pride and thrill of looking at a finished model you build and saying “I built that model!” Meanwhile I am looking forward to going back to my work bench and see what “New Tracks” John is going to push me down next. Can’t wait to find out.
But before I do that, I want to introduce you to a man who I believe is a fantastic historian for O Scale modeling. When I first talked to Cary, he was not sure what he had to offer as a mentor to O Scale modelers. I told him his great knowledge of where O Scale has come from, his significant collection of models of our O Scale history, and his general interest in all areas of model railroading was enough for me to know I wanted him as my mentor, and I am sure that some of you will also want him as your mentor. Please meet a really special O Scale modeler…

Carey Williams

Hello Jim ... flattered that you think I should be the subject of one of your articles…. technically I’m not a modeler…. but a collector who enjoys models … and other things .. but here goes.

Hello O scale world … Jim was very kind to ask me to submit a profile … I’m new to the O scale world, but not the train world, and I’m more or a collector, researcher, historian, preserver and all around enthusiast than a "modeler" so run if the mention of tinplate and a 3rd rail offends you.

Having had the good fortune of being born into a family of antique collectors, I was exposed to antique toy trains and trips to ride amusement park trains at a very impressionable young age which caused a life time of collecting. At the ripe old age of 10 having young and cute on my side and mowing lawns as a source for cash to fund the hobby, a loving dutiful dad would take my sister (doll collector) and I to hit all the garage sales every Saturday. Soon the ping pong table in the basement was sacrificed for a train layout, O gauge post war, or heck, anything I could find. Having little to no discipline in defining a single gauge, soon everything from vintage N to Standard Gauge was being dragged home. Weekly trips to the library checking out all the toy/model train books, especially Louis Hertz's "Collecting Model Trains" which was memorized. Upon turning 12, I was able to join TCA as a junior member, oh the joy of racing through the halls filled with trains of all calibers ..but my taste began to refine for the old and unique. The monthly TCA shows provided a space in which to dispose of the quantity and find the quality. Soon my passion was Lionel before 1912 and Ives Transitional standard gauge. No matter what the field you pursue, always do your research and seek out others who have achieved what you hope to aspire to as mentors.

The first exposure to O scale was the back wall of Bill's Hobby shop in Park Ridge where Bill Sanchez always had a brass wall ..beautiful and gleaming ..and expensive... so I was happy to admire and lust, but my money went for tinplate. One of the best parts of having a hobby are the friends you make (many for life) that share the passion for the flanged wheel. Migrations to York became the ritual along with train spotting in the east... GG1’s at South Amboy, walking across Hell Gate etc... At 18 was helping Tom McComas write the Lionel Standard Gauge Book, great fun learning photography and history.

Upon turning 21, I sold the collection to buy a house, regrets sure, but the next step
of life. Interests turned to antique motion picture technology and antique bicycles (pre 1900). I formed a Cinema museum in Chicago, till I learned fund raising was not my strong hand. The antique bicycles have been a marvelous adventure riding in many countries, and making friends sharing the same passion around the globe. The train gene went dormant till my friend Andy Jugle presented me with a set of his articles published in the TCA Quarterly about Amusement Park trains (2004) ....this would prove to be a big and heavy new direction of train travel. Those early innocent train rides at the amusement park, watching with that desire to take it home for the back yard would soon materialize into reality.

By the pound Amusement Park trains are a bargain, assuming you have a huge piece of land to run them on. So all those years sans trains came back with a vengeance... having a warehouse is handy when collecting 12" and 15" trains. The real fun of a park train of course is running it ..so traveling around visiting railroads pulling a car trailer hauling rolling stock was a fun way to meet more large flange folks. 2009 the opportunity to purchase Eden Springs Park at House of David, Benton Harbor, Mich surfaced and was acted upon. Eden Springs Park opened in 1908 and closed in the 70's ...having a 15" railroad circling the property. The park suffered from an advance case of "deferred" maintenance... but the 8 stall engine house and 1920's station were still intact, so a non profit formed to help restore and operate the park. It has been a interesting learning experience and very satisfying to see smiling faces of families as they board the trains ..a fun way the share one's hobby/passion/obsession.

In all my hobbies, I enjoy researching to find the back story, if possible, of the pieces ... within my paperwork for the Amusement Park trains is a set of Model Maker Magazines 1924-36 tracing the model building trends in America ..first through live steam and giving way to electric scale models. By 2015, the toy train bug returned back to old habits of the pre 1912 Lionel and Ives transitional to rebuild the collection....and this time expanded to American 2" dating back to 1897 ..covering the new electric novelty of trains. Whilst collecting and researching the very early pieces, memories of those O scale pioneers from "Model Maker" returned..now the search for models by Birch, Egolf, Alexander and Icken were added to the list. The attraction for early O scale is endless with so many little manufacturers each with a unique talent for capturing the essence of model railroading. Yes, if you are a rivet counter, the early pieces are far from precise ... in today's world of 3D printing and digital capture, the playing fields are even among the manufacturers ( or could be /should be), so all personal taste and flavor is removed leaving a perfect model..which is beautiful and I can appreciate that in others collections and layouts; I applaud character and unique style. My vintage line in the sand stops with 1955 including the first, second, and third generations of O scale manufacturers ....and stopping as Max Grey, Kemtron, etc. continue to pull O scale to the next station.

In the tin plate world, folks have walls filled with trains and perhaps a layout ..in the O scale world folks have closets filled with boxes of trains and perhaps a layout. Being a visual type, I need to see or I do not need to own it ... so with a foot in both worlds, I chose walls of trains and a layout . Nothing like acquiring a new (old) piece, doing some research about it, cleaning it up and seeing it run down the tracks .

Double heading 1904 Cagney's at Eden Springs Park 2015
Vintage O scale began with inside 3rd rail (1920's), jumped to outside 3rd rail (1930's) and by 1939, two rail won the battle, so building a layout one must chose number of rails to be used...or...fortune has shined brightly on me...being offered a complete 1939 Multiplex 2 rail layout and the remains of a very large outside 3rd rail layout. Now the fun of working the vintage pieces together so it does not look like a bunch of flea market left overs. In the hopes of not having a plywood central...it has been great touring layouts during open houses and asking questions about scenery. Owners have been very kind to share building tips. Vintage rolling stock, upon vintage track...need proper period vintage buildings to pass by....so the search for Model Structures (late 30's -40's)....I was most fortunate to have just returned from CT picking up the late Fred Dole's collection of Frank Ellison's "Delta Lines" pieces. Fred's wishes were to keep all the Delta Lines piece together, so now the challenge of blending the legendary buildings into the layout.
With luck, I'll have the layout up and running with the Delta Lines pieces to host an open house during next year’s "March Meet". Half the fun of owning, is sharing it with others.

Some of my prize vintage O scale pieces that I have been fortunate to acquire are:

- 1939 NYC World's Fair, Ed Alexander built PRR S1, Walther's streamlined Hudson, and several freight cars.
- Two buildings from the layout of the Museum of Science and Industry, Chicago, Illinois ... fond memories of chasing the trains around the layout as a kid.
- Minton Cronkite built Sante Fe Mountain 1935 ..so still O gauge, Q gauge after 1937, Walthers City of Portland streamliner 1934/5

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Top to bottom front row Scale Model Railways PRR M1 circa 1935-40, runs like a top, NYC 460 17/64ths built by Herman Kloppenburg 1937, George Stock 440 from 1950, this man could paint! Saginaw H10 by Bill Lenoir circa 1941, Lobaugh 060 circa 1950, NYC Hudson built by Fred Icken mid 1930's, Icken models were built to run for miles, 12” to the foot miles, double gear reduction.
1939 Alexander S1 built for NYC World's Fair.

All any of us can do is look at some of these models or photos to know how really special some model railroaders of the past brought our hobby to a higher level of model building. I wish I could have know them all. What a thrill it would be to just sit and watch them build a model.

B&O Docksider, scratch built by Frank Caliri 1950, Model Structure buildings from the late 30's -40's. MS buildings were the gold standard of buildings in this era...beautifully built ...but expensive at the time, you can spot their unique designs on many of the best club and private O scale layouts of the period shown in all the periodicals.
Two early diesels by Adams and Son, Siebers, Baldwin E, CLW cast PA's, Bayshore..DL 109, Jack Brable built sharks 1/64ths scale ... all circa 1946-1950. Burlington E5 (Adams and Son castings) set built by Bernard Corbin, Exacta cars.

Three scratch built T1 by Charles McCune 1947 pulling a string of Fischer cars, Parmlee & Sturgiss Cleveland electric 1940's, Pratt 060 1939, modified Lionel Hiawatha pulling Walthers cars, unknown set of F units with rubber O ring drive, Acme 1/64ths PRR P class electric circa 1936.
Scale Model Railways Erie K4 circa 1935-40, Megow Consolidation circa 1940 ex Smokey Mountain, Control
tower and freight shed from Museum of Science and Industry layout, two exceptions to the pre 1955 rule,
Bridgeboss train shed and TW's Grand Central Station ... I'm a sucker for train sheds and Grand Central.

Frank Ellison's Hamm Berger
sausage factory from his Delta
Lines layout, part of the city of
Donaldson founded in 1942
featured in Model Builder, later
highlighted in Toy Trains in 1953.

Looking for it's neighbor ..the
"Spot Cash" ..building ..to help
rebuild the town of Donaldson. I
know it's out there somewhere. In
background, some of the hand
painted back drops from Delta
Lines. Fun project to piece back
together the legendary world of
Frank Ellison who inspired so
many modelers.
The future in O scaling for me has many new challenges to master/ok get by; soldering ...(so it does not look like I soldered it), building mountains/hills/valleys, capturing ripple effect on water, tackle a few Ellison buildings to help fill in gaps recreating some of the towns, trees & bushes, and getting the grass to wave in the breeze "look".

The hunt for vintage O scale pieces will continue, searching for items by Paul Egolf, Frank Birch, Ray Waller, Alexander, Icken ,etc... so many extremely talented builders have left beautiful models to discovered.

I look forward to meeting you at a show or please come over and see the collection during the March Meet open house.

Cheers Carey

Thank you Cary so much for sharing your knowledge and photos. If any of you have questions or think Cary can help you with your collecting or modeling please email him at Cary.Williams@oscaleresource.com.

My article about great historical modelers would not be complete without a discussion of the first modeler I found when I was very very young, Mr. Frank Ellison.

There is a new Delta Lines Friends Facebook page that has some great historic information about Frank Ellison and his magnificent model railroad. I hope you will check it out. One of the reasons I hope you will check it out is you will find modelers and manufacturers like Dennis Brennen. I want you to meet Dennis and enter his contest drawing to win one of his Frank Ellison model Kits.

Riding with my daughter, 2012.

Dennis Brennan

I have been writing about manufacturers and talented model railroad builders who I believe can pass along their modeling skills and techniques to less skilled modelers and help them get more enjoyment and satisfaction out of their model building efforts for over a year.

Those of you who have read some of my “New Tracks” articles know that the mentors of today had mentors, or learned by trial and error from reading articles by talented modelers who are no longer with us. One of those legends that many, especially us older guys, learned from was Frank Ellison and his model railroad “Delta Lines”. I know I did.

Recently, I joined a new Facebook page called “Delta Lines Friends” and found myself taken way back to a time in my youth when getting a new piece of Lionel for Christmas or my birthday was what I prayed for. Having a great Dad to help me get my model railroad empire set up, running, and teaching me the fundamentals of model building started me down a lifelong path of creativity and enjoyment. Being able to read articles by the great modelers of yesterday and today, and dream of being able to build my own model railroad empire, formed my basic model railroad education. I am so lucky to have all these memories that are still so vivid today. I am sure many of you have similar memories and understand their importance.
The Delta Lines Facebook page immediately triggered all my childhood memories because one of the most significant modelers I read about way back in my youth, and who still influences some of my model building today, is Frank Ellison and his model railroad “Delta Lines”. While I was too young at the time I could have visited or met Frank Ellison or seen his layout, that did not stop me later in life to try and build some of my models using some of his techniques. Fact is building some of those models is partly responsible for getting me started in O Scale modeling and learning to scratch build models.

One of the posts to the Facebook page was by Dennis Brennan, who talked about the second O Scale Delta Lines kit he was going to release in February 2019. I didn’t know he had produced the first kit. Naturally I contacted Dennis to find out what he was doing.

In our telephone conversation I found Dennis has a Company, Brennan’s Models, and is 100% in agreement with me about getting more modelers building models, and the need for talented mentors to help less skilled modelers improve their modeling abilities.

We also talked at length about how we both discovered Frank Ellison and the Delta Lines when we were very young, and have had his influence in our modeling up to this day. I bet there are a lot of you out there who also have stories you can tell about Frank Ellison.

Dennis is very proud of his kits, and believes that the instructions he includes in his kits not only allow a new model builder to successfully complete the kit, but also to learn some of the art and skills involved in model building. Dennis told me that one of his pet peeves is the lack of helpful instructions provided by some kit manufacturers. I learned that a modeler who builds one of his kits gets a great mentoring experience from reading and following the instructions in his kits. Dennis even includes recommendations on what glue and paint to use. Well, I wanted to see these instructions.

I knew from our first conversation I wanted to profile Dennis and have him talk about his Company and the models he produces. While Dennis is a 3 Rail O Gauge Modeler, his kits and products are just as suitable for O Scale modelers. Please meet Dennis Brennan owner of Brennan’s Models, and enter his contest drawing to win one of his kits with his fantastic instructions. Good luck to all of you.

Brennan’s Models
Before talking about his company, I want to have Dennis tell you a little about his model building background, and show you some photos of his model railroad. I think you will be as impressed as I am with his accomplishments, and philosophy.

First his philosophy as stated on his web site: “For many model railroaders who grew up in the 50’s, toy trains and the holidays are synonymous. I still have the first Lionel Scout™ set my dad gave me for Christmas so many years ago. His gift was the start of a lifelong hobby that fuels my imagination as much now as it did then. I well remember eagerly waiting for the latest Lionel catalog and then getting totally lost in its pages. I could easily see the trains on my 4 x 8 foot sheet of plywood traveling through that vast artwork-inspired empire.

Today, I can give substance to that imagination, bringing those dreams into reality. I classify myself as a “hi-railer”. Although I use three-rail track, my layout would be considered “scale”. I don’t use any oversized accessories, and generally try to make everything look as realistic as possible. While I don’t use a “fast-clock” or timetable operations, the trains usually run with a purpose. I really enjoy setting out and picking up freight cars at various industries. For me, this is what the hobby is all about.

For others, the joy is the “toy” in the train. I readily admit – a “toy-train” layout has a charm all its own. Reality falls by the wayside with giant gatemen and larger than life crossing signals protecting the roadways. Unencumbered by scale fidelity, one is free to play with operating coal loaders, raise a noisy bascule bridge, or
place passengers on brightly colored tinplate stations. There is a childlike innocence about such layouts, and therein lies the magic.

There are some, however, who are caught between the two ends. They love their toy trains, but yearn for something more realistic. Somehow they just never get there, and the layout, if there is one, just stagnates. Maybe they're frustrated perfectionists, or otherwise convinced that they don't have the necessary skills. Well, I'm here to tell you that I was one of those people. My first layout never went anywhere, because I was too afraid to do anything. When I started on my present layout, I decided to just go for it! I had read all the books, and dreamed all the dreams. So over the ensuing years, I've had a lot of fun doing all those things I'd never done. In the process, I figured out that it's not all that difficult.

Still, when I go down to the basement to play with my trains, I'm often transported back to those carefree childhood years... And even though I don't run that first Lionel Scout™ train, it's Christmas all over again. It really is true... Model railroad is fun!”

I can easily relate to what Dennis is saying because I did the same thing, going from Lionel to Lionel with Scale structures and scenery to full O Scale modeling. I know that there are modelers today doing the same transition because I see their modeling and hear from them all the time.

Let’s hear from Dennis about his modeling career, if you can call it that!

**Dennis Brennen**

I built my first plastic model kit, a Revell Tugboat, when I was in second grade. So, I guess you could say I’ve been building models for over 60 years. But although I’ve been playing with trains since I was 4 years old, my experience with model railroad kits was limited to Plasticville on my 4 x 8 Lionel empire. Ah, those were the good old days when Carbona Cleaning Fluid was the glue of choice suggested by the makers of Plasticville USA. The following year, while looking for Superman comics in a used book store, I found an issue of *Toy Trains* magazine and discovered Frank Ellison. Since then, even though I read every how to article I could find by Ellison about building the various industries on his Delta Lines, I never did attempt to build one. When I couldn’t find brick paper – a staple item in many of his structures, I didn’t bother to go any farther.

Let’s jump ahead to my mid-twenties, married, two toddlers, an Irish Setter and the beginnings of a small, 3 rail basement layout. I had acquired all the standard model railroad books by Kalmbach on benchwork, track planning, wiring, scenery, kit-bashing, etc. And even though they were written for HO scale modelers, I reasoned that the basic concepts were the same.

I dropped my tinplate track in favor of GarGraves and soon found myself immersed in building a Lionel Rico Station kit that my wife, Sandy, had bought me for Christmas. Since then, I’ve built dozens of kits-plastic, resin, wood, plaster and realized a penchant for a combination of kit-bashing and scratch building. Today, I want to infect others with the simple joys of model building – a way to escape the tech savy, internet driven, instant gratification of our daily lives.

So Dennis started his company to build kits for modelers to build. After talking with Dennis and reading his profile, I went to his website at [https://brennansmodelrr.com/](https://brennansmodelrr.com/) to find out more about what he was doing. Here is what I learned on his home page:

**Welcome to Brennan's Model Railroading products.**

“This company is owned and operated by me, Dennis Brennan. I'm a life long hobbyist and actively building an O-gauge, hi-rail layout. I'm also a freelance commercial photographer and have written and photographically illustrated several articles for Classic Toy Trains magazine. My photographs have also appeared in the Classic Toy Trains 2000 calendar, Model Railroader, O-Gauge Railroading and Trains Illustrated (a short lived Kalmbach publication.)
My flagship product, Brennan's Better Ballast, was born out of a quest to find a "better" ballast than any of the commercially available products. Since its introduction in 1997, the product line has expanded to include Brennan's Natural Ground Cover materials, two Weathering Sets, and the ultra-realistic Chain Link Fence Kit and the Industrial Wooden Fence Kit.

In addition to quality, my products are noted for their complete, detailed instructions that anyone can follow. Tony English, in a review of the Chain Link Fence kit for O Gauge Railroading, said, "...the instructions turned out to be not only clear but also elegantly written. Their author has a sense of style as well as an excellent grasp of sequence.

Ideally, my growing product line will help you achieve a degree of realism that you may have thought unattainable. Along the way, you'll not only enhance your modeling skills but also have a heck of a lot of fun.”

I encourage you to read all about his products on the website. I personally find it fantastic that he is producing the Frank Ellison Tribute series of models because it keeps alive in the minds of young modelers the work and abilities of one of the model railroaders, back in the 1930-1950 time frame, who provided stepping stones for all of us to use to increase our level of model railroad knowledge and enjoyment. Thank you Dennis for this effort and producing these kits.

As with other manufacturers, I suggested Dennis offer a contest drawing where he provides one of his Frank Ellison Tribute kits to the winner with his personal mentoring on building the kit. Of course, the winner may not need much mentoring other than reading the kit instructions. The kit Dennis decided to offer is the first of his Frank Ellison Tribute series kits, The Box Plant shown on left. Dennis believes the winner will find this kit a great model for his railroad, and a learning experience for the modeler in model building.

How to enter the Brennan Models contest drawing:

The contest winner will receive the kit and mentoring from Dennis to ensure he/she builds the best model possible. I know the winner will benefit from this experience, and have a model he/she will be proud to say: “I built that model”.

The contest winner will be asked to tell us about his/her building experience including providing photos so we can all benefit from their experience. The winner’s comments and photos will be published in a future “New Tracks” article in his publication. I wish you all good luck. Please show your thanks to Dennis by entering his contest.
Before we go: Dennis just announced a Sneak Peek at the next kit in the Frank Ellison Tribute Series. It will be a model of the Richmond Packing House. Dennis says it still is a work in progress. Changes will be made and then we’ll cut another kit which will be used for writing the instructions. Assuming all is well, we then go into production. The kit will be available at the October York. Now please see some of Dennis photos.

Here are some shots of The Sandy Harbor Terminal Railway. I created this layout to appear in a 4 part “How To” series for *Classic Toy Trains* (12/07, 1/08, 2/08, 3/08). I subsequently wrote a book *Realistic Modeling For Toy Trains: A Hi-Rail Guide* using the Sandy Harbor as a basis to explain how to build a realistic model railroad.

I’m a professional photographer and all the photos were shot by me in my photo studio. The layout was built in my studio and remained there until 2017 when I sold it to a fellow in Maine.

Almost every building on that layout was a kitbash. Some such as the overhead crane in the Team Track Unloading shot are what I call a scratch-bash – part kit, part scratch. The side support girders come from a Plasticville Signal Bridge, the horizontal girders are Atlas HO girder bridge panels. The overhead crane was scratch built from polystyrene over an HO freight car truck assembly riding on HO rails.

The uppermost background buildings in the Tug and Barge shot are mostly kitbashed HO Walthers Cornerstone series used to force the perspective. The water is a sheet of pattern glass used mainly for shower doors and patio tables. I simply spray painted the underside Camouflage Green.
The Prepro Laser Cut Final Straightened is the OBlong Box Co. is the first kit in my Frank Ellison Tribute Series and the Hap Hazard Product shot is the second which will be released this month.

Please let me know if you need anything else. Sincerely, Dennis Brennan  816-252-4605

Remembering Frank Ellison and his model railroad “Delta Lines”.

When you go to the Facebook page “Friends of Delta Lines” please note some of the original articles that Frank Ellison wrote about his model building and his model railroad. Even thought they are over 60 years old, I think you will find them interesting and show what model Railroad building was like back “in the good old days”. The modeler profiled next is a member of the site and that is how I found him.
Mathew C. Jackson

Here are a couple of photos of a "concrete" bridges I built a few years ago for the club layout. In Ellison's style, it's essentially a support frame for the trains with a facade that looks like a concrete arch bridge. It was part of the "Modeling on the Cheap" article I was working on a few years back.

These are some of the models I build using Frank Ellison’s techniques.
Concrete Bridge

The Acme Brewery building is essentially an empty shell used to cover an access hole. Frank Ellison liked to use a lot of card stock and scribed detailing. Because of the size of the building, stronger materials were obviously required, so it's made from MDF with wood framing and molding.
I built this one several years ago. Frank Ellison liked to use card stock with scribing and layering to get the effects. I'm a fan of more modern concrete structures. The materials used here were MDF, poplar, and moulding. Since the photos were taken, another member made a peaked roof for it. I'm trying to find photos of a view-block warehouse I built using MDF, moulding, and printed paper to make a concrete and brick look for a background building.

I'll try to track down the view-block warehouse I had built. It was basically MDF with pine framing and brick paper panels. A couple of years ago, one of our members asked if he could put an interior in it. We gave him the go-ahead provided that it was a cheap upgrade (modeling on the cheap theme). He added an interior, lighting and made windows from strawberry baskets, vents from juice bottle tops, paper signage, etc. I've attached a photo of the modified warehouse and a better shot of the finished bridge in place, but I'll have to find the originals from the warehouse construction.

Matt
Thanks Matt for your comments and photos. I appreciate your interest. You can reach Matt at Matt.Jackson@oscalereresource.com.

I hope you have enjoyed this “New Tracks” article. My memories and feelings about these past modelers is one reason I am writing these “New Tracks” articles. While you cannot personally talk to these historic modelers, they were instrumental in helping us get to where we are today in our great hobby.

Ask current model builders and I bet they will tell you about modelers from their past, who helped mentor them in their modeling. If you have a favorite modeler who helped you, let me know so I can profile him in a future article. Contact me at JimKellow@oscalereresource.com.

I wish you the best of luck with your modeling. Please enter Dennis Brennan’s contest drawing as a way of saying thank you to him for his interest and help with keeping Frank Ellison’s work alive.

Thanks for reading this far and good luck traveling your “New Tracks”. Time for me to return to my work bench and keep hopefully improving my model building skills.
Get a Grip on a Grab

How to make fine scale grab irons.

The process to create a grab iron is fairly straightforward. Well, it was for me after trying so many different methods and not liking the results.

The starting point is 0.016” diameter brass wire.

The first thing that needs to be determined are the overall dimensions. To make the same grab over and over, I create a jig from sheet plastic. This allows me to bend a tight cornered “U” shape. You will need to determine the length of the legs with a couple trial and error pieces to get your process down.

The next thing is to determine if you are making a straight or drop style grab iron. The process to produce each or these is about the same. For a straight grab, the mounting tabs are all that need to be created after the “U” shape is created. The length of the tab is 0.060”, and should be repeated so that the tab will be the correct shape each time. A piece of styrene 0.080” will create the offset for the straight grab, or at this step, will create the length of the drop grab. The next step is to cut the length of the tab after bending.

For the drop grab, a second spacer block 0.125” is needed to create the second offset.

Once the tab is trimmed to length, the tab is placed back into the vise and clamped to crush the tab flat. You will also have to do a bit of trial and error here. Too flat and it becomes too weak. I like to get the tab around 0.006” thick.

With the tab made, you can drill the hole for the rivet to attach it to the model and still maintain enough strength.

The method of choice to attach the grab to a model is a 0.5mm brass rivet from Model Motor Cars. The rivet can be soldered to the tab or just use CA to attach the rivet and grab to the car side. The pictures following will show step by step on the procedures.

Something so easy I can do it!

Happy modeling!

By Ross Dando

Have a modeling question for our experts? Please send your description of your modeling problem to backshopsolutions@oscaleresource.com.
1 - Make your first bend

2 - Jig it

3 - Fit it
4 - Space it

5 - Bend it

6 - Space it again
7 - Support it

8 - Bend it again

9 - Position the tabs
10 - The stubs before tabs

11 - Crush the tabs

12 - The tabs
13 - Drill hole in tabs

14 - The drilled tabs

15 - Ready to install
16 - Ok, now ready to install

Finished grab installed
Scene Around the Layout

We are proud to feature readers work. Depending on your response we would like to make this regular feature. So get those cameras and cell phones out and start shooting! High quality JPG or TIF files are only.
Email to daniel@modelrailroadresource.com with a description of your pictures.

Hello: Here in Albuquerque, we had the National Convention of the Train Collectors Association. I was asked if I could bring two modules to the event. And I did. Included on the module was the cardstock model of the Newspaper building with the New Tracks logo on the sides. Above is a photograph taken when layouts were being set up. You can see mine in the foreground. Take care. Bill Lubert
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

By Michael George

In a never ending quest to populate my layout with true 1/48 vehicles, I broke down and bought one of the Woodland Scenics Coupes on sale. I was mainly looking for a quick way to add some variety to my meager fleet without spending a ton of time reworking something.

I have to say initially I was disappointed as it appeared quite toy-like out of the package. However, after about 30 minutes of work, it has been transformed into a reasonable model of an early '40s Ford. Below are the biggest issues and how they were resolved.

- The axles are too long making the tires stick too far out the side. They were shortened with some rail cutters and the wheels re-attached.
- The glass is way too thick. Eventually I will replace all of it, but in the meantime, I just removed the side windows.
- The included figure is well proportioned, but hideously painted. It was quickly repainted.
- The absence of window gutters and side trim in the molded part is replaced with painted on trim which looks gaudy. It was dulled down by dry-brushing dark blue and rust over it.
- The front bumper seems too large; it was thinned down with a file.
With the windows removed and headlights and taillights masked, the entire car was sprayed with Dullcoat to kill some of the shine.

A wash of thinned india ink brought out details in the wheels and grille.

Dry brushing with earth and rust colors gave an overall appearance of what I would expect from a well-used eight year old car.

While not perfect, or a perfect replica, the finished vehicle looks OK and will fit in well on the layout as long as it is not used as a foreground model. The proportions seem to look better from the rear than from the front. I don't plan to use the lights as I like to move vehicles around on the layout and don't like the idea of being tied by wiring to a specific spot.
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.

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, Bascule 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: John Keil’s Brass O Scale Trains. The following is a list of items being sold by Mrs. Keil from John’s collection. Because of price fluctuations Mrs. Keil is accepting reasonable offers on the following. Please Email her at oscaler@aol.com for more information and others lists.
#198 B & O Wagon top hopper HALLMARK
#281 UP Steel Caboose KTM
#387 Super Chief PECOS RIVER
#616 Masonic 6 Car PRR Complete Train Set WEAVER
#355 NY Central Express Reefer INTERNATIONAL
#386 Santa Fe 60’ Flat Car PECOS RIVER
#392 Santa Fe Baggage Car PECOS RIVER
#393 UP RMD Yellow Gray PECOS RIVER
#535 UP Atlantic 4-4-2 Set SUNSET MODELS
#536 UP Challenger Early 4-6-6-4 3RD RAIL DIVISION
Mrs. John Keil Email: oscaler@aol.com

FOR SALE: Large O 2 Rail collection just in: Brass and Plastic from Weaver, Atlas O, 3rd Rail, IMRC, PSC, OMI, Kohs, Sunset, Wasatch, PRB, MTH, Key, GGD,Red Caboose, Trainman and more. Over 300 pieces! Old Pullman code148 flex, switches, buildings in kit & built up. Crest /Aristo controllers. Control Master 20's. Tools, Framed RR Art. And More! Still sorting and adding to spreadsheet almost daily. Send an email to burrett@comcast.net for link or click below to see my constantly updated spreadsheet with pics.
Bruce B. Blackwood Email: burrett@comcast.net Click here to download list!
O Scale Shows & Meets

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

Click here to send us your information.

O & S Scale Midwest Show
This year Saturday and Sunday, September 21-22, 2018
Formerly the Indianapolis O Scale Show / S Scale Midwest Show
New name but the same great show! This is a dedicated 2 rail O Scale and S Scale show; however, we encourage and welcome the many modelers and collectors from the 3 rail and high rail side of the hobby to attend. There are many aspects of the hobby, including building, scenery and more that applies to any scale. Moreover, this show is a great place to get inspired while meeting old friends and making new ones!
Website: oscalemidwest.com/
Email: info@oscalemidwest.com

Southern New England 2 Rail O Scale Show
October 5th, 2019
161 Chestnut Street, Gardner, MA 01440
Train show with a large selection of dealers specializing in everything O scale! Ow5, Proto48, On30, On3. Free Parking and on site refreshments available!
Show Hours: 9:30am-3:00pm. Admission: $6.00 per person, $8.00 per family
Now booking vendors for 2019 show! Contact Show Chairman for info!
Email: sneshowchairman@snemrr.org
Web Address: http://www.snemrr.org/index.html

Eastern PA 2 Rail O Scale Train Show and Swap Meet
Strasburg PA
October 12th, 2019
Strasburg Train Show: Two-rail swap meet at the Strasburg Fire Co, 203 W. Franklin St, Strasburg, Pennsylvania. 9 am-1 pm.
Admission $5, wives/children/military w. ID free, tables $25 for first table, additional $20 per. Great food, modular layout, clinics. Contact John Dunn (609-432-2871) Click here for map

Winchester O-Gauge Continental and American Meet
Saturday October 19th, 2019
Kings School, Romsey Road, Winchester
Hampshire, SO22 5PN, UK
All O-scale: layouts, traders, societies, running track, refreshments
e-mail: jasond1947@gmail.com
website: www.winchesterogaugemeet.co.uk

Southwest O Scale And Oklahoma Narrow Gauge Group
Combined Meet
Friday, October 25 - Saturday, October 26, 2019
Northside Christian Church
2526 NW 122nd Street, Oklahoma City, OK 73120
All O Scale 2-Rail & 3 Rail (Scale Compatible) and Narrow Gauge (All Scales) modelers and dealers are cordially invited to this combined meet. Contact: George Wallace H: 405-751-7649, C: 405-818-2277.
E-mail: thudchief1@sbcglobal.net
website: www.oscalesw.com

The Cleveland 2 Rail O Scale Meet
Saturday, November 2, 2019
Cleveland O Scale Meet our 37th annual show
9:00 AM to 2:00PM at the UAW Hall
5615 Chevrolet Blvd. Parma, OH 44130
Admission $6, free parking, large facility
Please note show time changes
Dealer load in Friday Nov 1 1-4PM Saturday 7-9AM
440-248-3055 email j3a5436@gmail.com

Atlanta - O Scale South 2020
Saturday February 22nd, 2020
Cross of Life Lutheran Church, 1000 Hembree Rd, Roswell, GA 30076
Swap Meet and Modular Layout plus Layout Tours following Meet. Hours 9 AM until 2 PM. $5 Admission (Spouses, Children Free). $25 per 8-ft Table (Includes Admission). Call Dan Mason 770-337-5139 to Reserve Tables.
Email: daniel@southernoscalers.com
Web Address: www.oscalesouth.com

Chicago March Meet
March, 13, 14 and 15th, 2020
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 West - S West and Narrow Gauge West
May 21-23, 2020
Hyatt Regency Santa Clara (San Francisco area)
Website: www.oscalewest.com

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By Dan 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 :-)

While this image does not look odd, it was at the time. Living in Lisle at the time, it was one of the coldest and snowiest winters in a while. The Chicago yards were clogged with trains. The CN on the right was parked here for three days while the other one for almost two days. That left one track for the BN and Metra to work with. As soon as one of these moved, another took their place.

Photo taken in Lisle, IL March 5th, 1994.
Check out our new Website. All back issues are available in Flash, HTML5, or PDF download. Submit your events and classifieds ads online, or request advertising information. Need information like drill sizes or prototype pipe dimensions, nut bolt dimensions or even Westinghouse brake diagrams? It’s all here. Check out our videos also!

Everything you need on one place!