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Cover: Canadian Pacific Railway FA2, #4094, backs out of the engine house where it received minor repairs after derailing while passing through Kaloma yard on Brian Ottaway's Osprey Lakes & Northern.

Centerspread: OLN GP9, #160, trundles past some workers busy at their tasks on a hot summer afternoon. This center spread and cover photos were taken by David Mehew on Brian Ottaway's OLN O Scale layout.
My O Scale Osprey Lakes & Northern Railway is a single-track shortline located in a hybrid area that is a cross between Northern Ontario and the foothills of Alberta, Canada. The timeframe of this railway consists of those wondrous years between the mid-50s and the early '60s, encompassing lingering steam power and first generation Diesels with a spattering of second generation Diesels, in my case an EMD GP30 and an Alco RS32. As well as OL&N power, this line offers trackage rights for the Osprey Lakes Lumber Co., a subsidiary of the OL&N, as well as occasional Canadian National, Canadian Pacific and Great Northern activity.

My pike calls a recreation room home, at 34’ long, 11’ at its widest, and 9’ at its narrowest. It is an around-the-wall design with a maximum radius of 58” and a minimum radius of 50”. Its width ranges from 24 to 42”. The widest portion is located at the future town of Kirby. The benchwork was made using box-framing with roadbed consisting of 1/2” plywood mounted on risers attached to the frame. The frame is constructed in sections so that the layout can be disassembled for moving if required, and is supported by a combination of cantilevers and legs. The trackwork consists of cork roadbed, prefabricated weathered track by House of Duddy, and switches by Right O’ Way. The rail is 37” above the floor, as I like to view my trains at eye level. I utilized some S Scale buildings, figures, and vehicles in various background areas to force the perspective of these scenes. Viewed with the normal O Scale items at the front, this helps give the impression of great distances.

Locomotives and rolling stock are a combination of brass.
(by various manufacturers), Atlas and Red Caboose plastic models, and a few wooden kits. The layout is powered by the tried-and-true block system. It is wired for two-cab operation, but at the moment I’m using only one cab. In the future, I plan to use both cabs, so operations can be performed in the yard and on the mainline simultaneously by two operators. Eventually I would like to have my locomotives equipped with sound.

Perhaps now is the time to confess that I’m one of those who derives great enjoyment from just watching trains meandering through highly detailed countryside. In other words, operation involving complex switching is not my cup of java. This is not meant to be any kind of slight against those who do; more power to them. For me, just two yard areas, with simple switching capabilities and not a lot of trackage for storage of copious quantities of cars, is sufficient.

The OL&N is the handiwork of three people. My good friend Osprey Lakes & Northern 2-10-0 #5712 chuffs across Dog River trestle. Old O.L.L.Co. wood caboose #02 passes through Kaloma yard on the end of a short work train. The foreman’s son is enjoying the opportunity to ride with his dad.
Osprey Lakes & Northern Mack Railbus #M-80 scoots through Kaloma yard with a Sunday morning sightseeing and picnic excursion.

Number 125, an RS3, saunters past Mehew’s Farm and Boarding House.

Osprey Lumber Co. #24, a Whitcomb 44 tonner, pulls its ancient caboose #02 through the Pratt truss bridge.

Great Northern SW1 #76, a frequent visitor to this railway, skirts the edge of Osprey Lake towing its four car train.

A traffic mishap on the two-lane road running through Talsma Gorge has a lot of motorists hot under the collar.

This fisherman, enjoying his favorite hobby, looks like he has a fighter on his line.

The daughter of a retiring engineer photographs her dad as he brings his GP30, #832, and train into Kaloma yard for the last time.
David Mehew built the framework, laid the track, wired the layout, and handcrafted my great haunted house. He also took the photographs for this article. Keith Hansen, author of *The Last Trains From Lindsay*, painted the superb backdrops and helped with many modifications. I concentrated on the scenery and detailed the pike. I should also mention that certain structures, such as the Chama inspired coaling tower and sandhouse, the wooden trestle, and the Kirby Station, were professionally built by another friend, Peter Reisiger.

The basic scenery material is “color-ized” plaster on a styrofoam base. I cast many rock molds to create a variety of outcroppings. Bodies of water involved numerous techniques such as a thin layer of plaster “rippled” with a wet sponge, painted black and covered with three coats of clear high-gloss urethane varnish. I’ve also used stippled glass coated with a thin wash of green water-based paint on the underside. And last, but not least, clear resin was used where depth was required. I also used real dirt, sandstones, bark, twigs, as well as a variety of commercial and home-made trees. I used a generous supply of materials from Woodland Scenics.

I personally prefer a well-populated layout. As a result, I have many little people and animals that call my layout home. These are from a variety of vendors such as Arttista, Preiser, and others. At the time of this writing, my scenery is about 80% complete with only the Town of Kirby to be finished. It will include a small church and graveyard, the Kirby Station, and some small industries. There is also a plan in the works to build a turntable here, so that I will be able to run my trains in both directions without “five-finger” switching.

Like many O Scalers, I began my model railroad adventures in HO. However, one day I visited an O Scale layout. The size and bulk of the locomotives and cars, the sounds of taking up slack, wheels clattering across rail joints, even flanges squealing on tight curves, grabbed a hold of me and would not let go.

Also the allure of free-standing detail, full brake rigging, scale roofwalks and the like (most of which was not found on HO equipment at the time), soon had me hook, line, and sinker. Granted, in most cases this fine detail was found on expensive brass models, but it was available if you desired it. Now that I’m in my sixties, seeing and working with larger detail is much easier on the eyes than in the smaller scales. Hey, I’ll be the first to admit O Scale is not all peaches and cream. It has a gluttonous appetite for real estate and consumes copious quantities of storage space compared to the smaller scales. I feel that the positives far outweigh the negatives. It is my sincere hope that the O Scale branch of the model railroad hobby will attract new devotees of all ages and will flourish in the future.

(See more photos of the OL&N starting on Page 61)
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It’s hard to believe that OST is now five years old. When I came on board back in September of 2002, I really had no idea what was in store for me, the bushy-tailed opinionated purveyor of swill oriented to the beginner that was “Easements”.

Now, I look back at it all and have to be at least bemused. I never thought of myself as an editor of a model magazine, but that’s where the twisted path has led me. Along the way I’ve met many of you, and the unexpected epiphany has been that I have learned much from you folks. Hardly the result a self-appointed Oracle expected.

You have taught me to listen, after opening my mouth (usually only to exchange feet), and to be just a bit more receptive to trying stuff even after experience has formulated opinion. After a pretty poor experience with early DCC, for example, I’m giving it a second chance. I probably would never have tried it again as a private O Scale citizen but maybe I’m a little less set in my ways than I was, especially when so many of you are (thankfully) collectively beating me into submission.

You’ve taught me that a whole new generation enthusiastically pursues their O Scale passions, a generation I (and many of us in my “age group”) didn’t even know existed. You younger guys may have different views about things, the desire for ready-to-run gear, electronics with all the possibilities, and modern-era modeling to name a few, but I like the cut of your jib. What you folks are doing is healthy and good, even if we grizzled folk might grouse about it. I’m glad you’re here.

You’ve all taught me that my way isn’t the “right way” for everyone, which can be a hard concept to understand and accept. One person might pursue “excellence”, another calls it “fun”; I’ve often called it “level of neurosis”. It really can only be called “satisfaction”, and that’s a definition only applicable to one’s self, not others. At the same time, this realization makes it sound like we’re a pretty combatative bunch. Well, we are. That’s what happens in an arena where the passions run high. That’s also what’s right about our scale, and the hobby in general. That passion is why O Scale currently is as healthy as it has ever been.

So, if it sounds like “Easements” and my time with all of you as Editor of these pages has taught me more than I may have taught you, it’s probably because it has. On the occasion of our five-year anniversary together, I can’t resist a little reflection, nor can I let this occasion pass without thanking you all. By the way, be afraid. The tail is still pretty bushy.

…and Since You’ve Asked

Many of you remember the little lad on the cover of OST #13, our second anniversary issue. I’ve had more than a few queries about what he was doing, train-wise, as our fifth-year issue approached, so here you go. Tad Scace is deeply into Thomas the Tank Engine, riding trains with Mommy and Daddy, and testing the laws of physics with his Lionel stuff (cleverly set up in the same room as my O Scale railroad-a-building). His railroad interests are still running strong. Here, he takes a break and switches some hideously expensive rolling stock (That’ll make the collectors cringe!) on the CTRRA. We’ll keep you posted as the situation degrades. Let’s go exploring!
Modeling Inspiration on a Budget in New York City

Since many of us visit New York City at one time or another during the course of a year, we should all get to know the New York Transit Museum. Their two locations, one in Brooklyn and one at Grand Central Terminal, and their varied workshops and tours provide traction modelers with numerous unique opportunities to learn.

The starting point for exploring the offerings of the New York Transit Museum would be to visit their website [http://www.mta.info/mta/museum/general.htm]. While at the website, be sure you join their mailing list. You can also join their mailing list by calling 718-694-3451.

Excursions and Special Events

The word “museum” implies static displays, but this is not what the New York Transit Museum is all about. When my 2007 calendar arrived in the mail, I was immediately attracted by the many special events available throughout the year. These events provide unequalled opportunities to explore the subways in a safe and organized manner.

One of the most fascinating events described was “The Jewel in the Crown: Old City Hall Station”, a series of special “members only” fundraising walks through the station offering opportunities to view the chandeliers, leaded skylights, vaulted ceiling, and decorative tilework.

Another event, certain to interest modelers of high-density urban transit, takes place in April. This one is entitled “Elevated Heins and La Farge”. This is a walking tour, with transit historian Joe Cunningham, revisiting the early days of the subway and exploring the elevated stations of the IRT designed by architects Heins and LaFarge.

Not all events are historical; some are just plain fun. For example, there’s a March event entitled “The L to the MMMM Train: Hipster Food, Puebla York and Wurst”. This can be described as a walking and eating tour, exploring some of the best ethnic eateries in Brooklyn and Queens. The train doors open, at each stop, on a vast and varied foodscape.

Finally, there are numerous excursions to tour locations like the New York City Transit’s Coney Island Overhaul Shop and Yard, the Corona Maintenance Facility, and the 180th Street Maintenance Shop Tour. Tours cost non-members $25 (members pay just $20), but how else can you legally and safely explore the infrastructure and inner workings of the world’s busiest urban transportation system? Bringing home just one perfect photograph justifies the modest fees!

Museum displays

The New York Transit Museum hosts a variety of displays at its Grand Central and Brooklyn Heights locations. During the Christmas season, there is an annual holiday train show at the Grand Central location. At the Brooklyn Heights location, there is an exhibit of photographs by Sam Hollenshead, titled “Front Lines: Rebuilding the Rails after 9/11”.

At Grand Central, from March through early July, there will be an exhibit entitled: “Architects of the NYC Subway, Part I: Heins & LaFarge and the Tradition of Great Public Works”.

Talks, Movies and Kids

There are frequent events on weekend afternoons in the Education Center at the museum’s Brooklyn Heights location. These include movies, lectures, readings, and children’s story hours. If it relates to New York City transit, it’s likely to be featured in an upcoming event.

The New York City Transit Museum obviously knows that the best way to ensure future success is to host pleasurable events for children. Kids can join children’s book authors Paul DuBois Jacobs and Jennifer Swender as they present The Deaf Musicians, the story of a jazzman named Lee who performs in the subway after losing his hearing.

Museum Store

At the online Museum Store, transit modelers located around the world will find access to a wealth of books, posters, umbrellas, t-shirts, jewelry, calendars, memorabilia, tokens, and replicas of important station tiles. Books that are likely to never show up at a local Barnes & Noble or Borders are described and available for sale. Even better, you can create an online wish list to help your family and friends choose precisely the best gift for birthdays and other upcoming holidays.

Directions

The New York Transit Museum is located at the corner of Boerum Place and Schermerhorn Street, in Brooklyn Heights. The Gallery Annex and Store is located in the Shuttle Passage adjacent to the Stationmaster’s Office at Grand Central. Both locations are open Tuesday through Sunday, and the Grand Central annex is also open Mondays. Plan your journey at [http://www.mta.info/mta/museum/index.html] and join their free mailing list.

Roger C. Parker
Bridge Crane
Overhead bridge cranes were located at various places including the team track, engine house, large industries and the freight house. It was used to move heavy loads from flats and gons.

The model is a brass import. The hoist trolley is positionable on the bridge. The model is painted and ready for you to simply hang the hook and chain on the hoist. Approx. Size= scale 20’ wide with 16’ clearance from ground to the bottom of the bridge. This is a limited run project that is sold direct only from B.T.S.

#18505 $119.95

Junior’s Shiner
Down by the tracks is the location for this early mobile home fit for any time from the 1930’s to the present. The nickname "shiner" came from the unpainted aluminum siding used on many of the early models.

It is a laser-cut kit featuring styrene sides and a wood core. Included are venetian blinds, color awning, and oil tank. Footprint, without awning, is a scale 29’ x 10’.

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McCabe Drying Kiln and Tramway & Storage Yard
The McCabe Lumber Co. Series Tramway (above right) connects the Slatyfork Sawmill to the storage yard, drying kiln, and planing shed. It is a key feature of the complex. In this kit are the eight drying platforms, cart turntable, single and double track tramways, and the loading docks. Also now available is the Drying Kiln, shown at the left above.

This kit consists of laser-cut basswood, plywood, detail castings, and a very complex appearance. However, the well-engineered construction provides fast and easy assembly. Weathered code 70 rail and spikes are part of this kit, as are the laser-cut spike holes! And in the box are hundreds of pieces of pre-cut lumber for stacking in the yard. If the Drying Kiln (#18230) is to be included in your complex, it will be easier to build the kiln and the tramway at the same time.

The footprint is of the Tramway and Storage Yard is about 100’ x 110’. The footprint of the Drying Kiln is about 33’ x 50’ including 13’ of deck on the front. And because of our engineering, it can be assembled in one of several different positions to better fit your layout. HO model shown; some details may vary between scales. It is a limited edition kit.

Tramway & Storage Yard #18250 $199.95
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It's funny how things happen. You can be sitting admiring a friend's layout, just minding your own business. Then, without warning, the mental die has been cast and you know that your layout is coming down as soon as you get home. That's the situation I found myself in during the early part of 2005 while visiting Warner Clark's Nickel Plate inspired P48 layout (coming in OST #32). I finally made the decision to switch from HO scale to O. Honestly, I'd been toying with the idea for several years prior to that fateful visit, getting used to the difference in size and learning what was available.

Unlike many long time O Scalers, I didn't have any baggage about 3-Rail versus scale, or standard O versus P48. There was no question that P48 was the route I wanted to follow, since my last efforts in HO were with P87 standards, nor did my modeling focus change. The Indiana and Whitewater theme would simply be super-sized to O Scale, letting me more thoroughly enjoy the modeling aspects that interest me most, prototypical trackwork, scratchbuilding and low-key operations.

Size does matter though; since I was going to use the same footprint from the old layout for the new, choosing what scenes and operational elements to include became very important. Thinking about this, I realized that a few key structures from my base prototype would set the stage nicely for a modest switching layout. Space constraints eliminated any kind of distance-running between towns, so combining these structures and track arrangements into a single scene could satisfy my criteria. On a small layout like this, every element has to contribute to the setting. There just isn't room for non-essentials that simply take up space. I found out quickly that I had barely have room for the buildings I did want with space leftover for the track! Welcome to the King of Scales, rookie!

So, what are these character-enhancing elements that set the stage for a model railroad? I think of three that are most common, the track, scenery and structures, and operations.

The Track
I've written before about my track techniques (OST #25), so let's skip that information here. What I do want to emphasize is how the appearance of our model track contributes to the overall effect of the layout. My base prototype has track that has seen better days. This is what drew me to it in the first place. The rail is light in weight, and none too straight, which keeps train speeds down. The ties are worn and weathered, often buried in the dirt, cinder ballast, and weeds that make up the right-of-way. This right-of-way was built in the 1800s on the towpath of an old canal that is still evident in spots. All of this says "branchline", not "mainline". The small yard at the line's end in Brookville, Indiana (Photo 1), shows how the newer tracks for the engine house, with their cleaner ballast, contrast with the old. Little details like this, telling of progress and the passage of time, are easily added to any layout. To model this on my layout (Photo 2), I'm using Code 125 and 100 rail, approximating what's on the prototype. I also believe that the flowing geometry of long turnouts (#8 through #10) say “railroad” instead of “model train layout”. Before you fire off that Letter to the Editor, let me say that I understand that not everyone has the space or desire to include such huge turnouts. These are simply my choices, not rules carved in stone.

Scenery and Structures
Scenery can make or break a layout. Warner's layout is one of the few I've seen in O Scale that has completed scenery. The area around his Malinta, Ohio, station and tower is just a joy to look at (Photo 3). This area also points out how faithful modeling of the scenery of a specific locale can have a great effect.

The Whitewater Valley region of Indiana that my prototype runs through has its own distinct geography, ranging from the open Ohio River floodplain near Valley Junction, to the steeper hills and valleys near Brookville to the north. Along the route, the track will sometimes hug the riverbank; at other times it skirts out across the flood plains filled with fields of corn and soybeans. Trees are mixed hardwood forest with a few evergreens.
While there won’t be much room for three-dimensional scenery on the layout, what will be modeled has to say “Indiana”, and not call to mind Appalachia or New England. Therefore, I’m going to pay closer attention to the types of trees represented on the layout, along with the grasses and other groundcover. (See my article in *OST #26*.)

Building types also play a key role in locating a layout in a particular region. The signature industry on the I&W will be a roofing shingle plant. This is what keeps the line going. My model will be scratchbuilt, and large enough to justify rail service. The feed mill from Cedar Grove (Photos 4 & 5) is another key building on the line that separates this railroad from all the others. Having distinctive buildings on a layout helps to avoid the generic look that you sometimes see, where the same building kit shows up everywhere. While scratchbuilding structures can be time consuming, the rewards are many. Another scenery aspect is to model the industries represented in the region you model. While the area surrounding my prototype has steel mills, chemical plants and paper mills, none of these were served by the real I&O branch that I’m modeling. Building products and farm commodities make up the bulk of the traffic base for this line, and so it will be on the layout.

Name everything: tracks, locations, and anything else you can name. In Richmond, Indiana, the Pennsylvania had names for tracks like “the Long Branch”, “the Short Track”, the “Barnum Track” and (my all time favorite) “the Stingy Track”. The name “Whitewater” shows up all over my area. There’s a town of Whitewater in the Whitewater Valley, which borders the White-water River where you can rent canoes from Whitewater Canoe Rentals, and on it goes. A strong regional name like this can give a clear identity to your modeled locale. Naming everything adds another dimension of reality to our modeling efforts for no extra cost or space, while giving tons of character in return.

**Operations**

I like low key operations. The first time I saw a train on the branch I was hooked. When I modeled in HO, the temptation to add trains and complexity to the layout was always there. I simply don’t have the space for it in O Scale, and that’s a relief in a way. This lets me concentrate my efforts on developing quality rolling stock and other detailing, often short-changed on larger layouts. I can also learn and appreciate what the prototype did to get the job done for their customers. Operations on a small layout need not be limited as many fear. Taking one’s time to enjoy things is wonderful, while running and switching at prototypical speeds makes the layout seem larger.

Construction of the I&W is well underway. Maybe the Editor will let me share more of that in the future.

---

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Distributed Power

Looking at the photograph of Train C-BAMPAM3-13, with BNSF 8981 and a trailing SD70-MAC, your first thought might be, “There’s only two engines assigned to this unit coal train.” That’s not the case. On the rear, 7,300 feet back, is a remote group of three more SD70-MACs, all engines being one consist.

In the early 1990s, on the Burlington Northern, we started seeing locomotives equipped with “distributed power” or “integrated distributed power” systems which consisted of an external control box mounted on the control stand with additional radio telemetry equipment. When the “ICE” monitor display screens became the standard, with the EMD 70 series and GE Dash 9s, the DP control system became a standard option available from the builders, with operational control shown on the ICE displays and program functions standardized for the railway industry.

Over the years, with the advancement of locomotive technology and horsepower ratings, train size (both tonnage and train length) has increased. The 15,000-ton unit trains (with 15,000-plus horsepower located on the head end) that were common up to the 1980s were at the upper limit of tensile strength of railcar knuckles and drawbar assemblies. When things went well you scratched over the hills; when they did not, you created scrap iron.

The trains of today are often over 19,000 tons, with locomotive consists producing more than 20,000 horsepower. They would be rolling scrap iron producers without the ability to distribute the available horsepower to reduce in train forces. “Distributed power” gives the locomotive engineer the ability to operate more than one locomotive within a train, either all in unison or in independent groups of units, according to what is necessary to navigate the territory they are operating over. Even with this technology, things can and do occasionally go wrong.

With the principles of distributed power in mind, let’s look at applying this prototype practice to our model trains and layouts. We will take a look at each of today’s control standards for both two- and three-rail layouts. Let’s first consider a few basics, trackwork and car weight.

If you are currently operating trains over your layout in an efficient manner, then there should be no problem with operating “DP” trains. On any layout, sub-standard track will cause problems regardless of the type of operation. Car weight is critical; freight cars need to be weighted to NMRA standards for the car length. The forces of an engine pulling from the front and an engine pushing from the rear can result in derailments if they are handling lightweight freight cars. On the prototype, you may see an empty train with a “DP” engine located at the rear of the train. Usually this engine is being used instead of a FRED (Flash Rear End Device), and its use is restricted.

Using conventional two-rail DC or three-rail AC cab control, multiple engines should operate well together in a multiple unit (MU) consist. You would be limited to a single operating consist, unless you could manage multiple consists in separate power blocks controlled by independent throttles (which would be very complicated).
Autumn Leaves

By now most of us have traded in our leaf rakes for snow shovels, and are anticipating the return of warmer weather. While raking leaves this past fall, I was reminded of an idea for making realistic looking leaves for my layout. It seems that I am always thinking about new ideas and techniques to improve my modeling, even while doing common chores.

Ground cover is very important as a part of detailing. A couple of years ago, I attended a HiRailer's meeting at York, PA, and heard one of the presenters talking about how he used real leaves to make scale leaves for his layout. He had commandeered a common kitchen blender (not his wife's) to process the leaves. Intriguing idea, I thought, and I filed it away for a future time.

Seeing some brilliant deep red maple trees this fall really caught my attention, and jogged my memory back to that meeting and the process he used to manufacture scale leaves for my model railroad. Here is what I found to work.

Gather lots of leaves from several types and colors of trees. Newly fallen leaves will work. Pulling leaves off the trees even works better. You want to catch them before they turn brown and start to lose their color. Separate the leaves by color and type. I used separate paper bags for each type and color. Large paper grocery-type bags work best, because they allow air inside. I looked for yellows, oranges, and reds. Some browns will work also.

Prepare the leaves by emptying the bag on a table. An outside deck table works well for this. Inside, you can spread newspaper on a work counter and spread the leaves out. Just be sure to be finished by the time the lady of the house gets home. Believe me, Hobo has learned through experience that "happy homes make for happy railroads"! Pull off any stems, and break the leaves into smaller pieces. Also remove any discolored parts, insect eggs, or any unsightly sections. Discard anything that doesn't look good. Mother Nature will provide lots more leaves. Work with the entire contents of the bag. I have found that breaking them into sections just works better for the next stage.

The Kitchen Blender

Don't try this at home with the lady of the house's blender. Remember what we said about the underwritten rule of happy homes making for happy railroads or you may just find yourself riding the rails along with this old Hobo. Kitchen blenders are constantly being modified and modernized. As a result there is an abundance of them that are available at garage sales and flea markets. I found several on sale for $5.00 each. One is all you need and if you treat it well it will last a long time. If not, you can always find another.

On to the Process

Put the leaf sections into the blender. Fill it about half full. Put the lid on the blender and turn it on. Set the control to pulverize. Agitate the blender by shaking to make sure that all of the leaves are blended. The processor actually tears each leaf into many, many tiny leaves that have texture and color. When all of the leaves are pulverized turn off the power, unplug the blender and empty the contents on a newspaper. I have found that I can get great results by spreading the leaf mixture onto the paper and placing the paper in a shallow cardboard box, like the ones that you see in the grocery store that hold soup cans. Put these in an upstairs bedroom to dry for a couple of days. Make several batches of different leaves and different colors. Color separation is important, but you can also blend colors for a realistic mixture.

After the scale leaves have dried, place them in sandwich-style zip-lock bags for storage. I like to label the bags with the type, contents, and date, for future reference. A shoebox works well for storing these until you need them for the layout. When you are ready to use the leaves, it is very easy to sprinkle them under fall trees and along the right-of-way for just the right look. They will look like scale autumn leaves. You can also use these leaves for flocking existing trees. Try lightly spraying a tree with a spray adhesive, or common hair spray, and immediately sprinkle the scale leaves onto the tree. You will find that, with a little practice and creative patience, you can make very realistic scale leaves that can be used in a variety of ways to enhance the look of your model railroad. Have fun. That's my tip for this time. Train whistles are calling this Hobo to the tracks!
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#9001 EMD F9, 36” fans, 48” dynamic brake, 2 portholes, Farr (vert) grilles

POWERED F “B” Units: Reg. $315, SALE $264.99
#3001 EMD F3-Ph3, F7-Ph1, 36” low fans, 36” dynamic brake, 3 portholes, horiz grilles
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#8002 EMD F7-Ph1 late, F7-Ph2, 36” low fans, 48” dynamic brake, 2 portholes, Farr (vert) grilles
#9002 EMD F9, 36” fans, 48” dynamic brake, 2 portholes, Farr (vert) grilles

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#4000 EMD F7-Ph1 (late), F7-Ph2, F9, 36” low fans, 48” dynamic brake, 2 portholes, Farr (vert) grilles

All kits include brass etched grills, appropriate detailed parts, and preformed grab irons for indicated model. These kits include only the parts above the frame.
I wanted a small sawmill for one of the sidings on my On3 Rio Grande Southern layout. At the 2003 National Narrow Gauge Convention, Sierra West was showing their new sawmill equipment kits, former produced by CHB. You can see photos of all of these kits by going to [www.sierrawestscalemodels.com]. These kits really look nice, but I was unsure of what pieces I wanted. Years ago, I had purchased one of Keystone Locomotive Works’ Danby Sawmill kits, which was produced in 1978. Upon looking over the kit, I decided that parts of it were not up to today’s standards for detail. I decided to use the steam engine and a lot of the small details included with the Danby kit, but decided to replace the husk (saw) and log carriage from the Danby kit with the same from Sierra West Models. In reviewing the rest of the Sierra West sawmill equipment, there was a carriage drive with hardware and a sawdust blower, live-rolls, a cutoff saw and dead-rolls, a log turner, log deck, a log haul, an edger and overhead line shaft system. Now the question to be answered was, “What do I want to include in my sawmill?”

One of the fun parts of the hobby for me is to research a project. I collected all of the magazine articles on sawmills that I had, to determine what equipment to include in my sawmill. Mine was not to be a full blown mill with all of the trimmings. I didn’t want a log pond as I didn’t have the room for one in the area that this mill was going located. Therefore, I didn’t need the log haul equipment, which is what is used to get the logs from the pond up to the log deck. My mill wasn’t going to produce finished lumber, so the edger equipment that trims the boards to a finished width was not needed. This mill will provide ties and rough cut lumber.

The Narrow Gauge & Short Line Gazette carried a series of articles, called “The Sawmill Chronicles” (from July 1984 to March 1986), covering the construction of the then CHB sawmill equipment kits, so I won’t repeat any of that here. These articles proved to be very helpful in determining what pieces I wanted and didn’t want. I made a preliminary plan as to what would fit into my allotted space. Then, a phone call was made to Sierra West and I purchased the kits for the husk, carriage drive and hardware, live-rolls, cutoff saw and dead-rolls, log turner, log deck and overhead line shaft system.

I built the husk, the log carriage, and the table parts of the live and dead-rolls. The live-rolls are powered, which gives them their name, and the drive shaft for these rolls is contained within the floor joists of the mill. The articles in the NG Gazettes and the Sierra West manual show that some of the wood support parts of these models are dummies, and they will be replaced by parts of the sawmill structure that you are building. Both of these resources build the equipment free of the sawmill structure. One of the articles in the Gazette series built the floor support struc-
ture, but never got around to fitting the equipment into the mill or building the mill itself. After building the above four pieces, I decided that it was time to see how much space these, and the other pieces of equipment that were to be included in my sawmill, were going to take. Using a CAD program, I drew the husk, log carriage, live-rolls and the dead-rolls in 1/1 scale (full size). I then inserted these pieces into another drawing such that they could be moved around. Other details such as the 42” gauge log carriage track, the floor joists to support the rails, and the floor joists to support the husk, live-, and dead-rolls, were added to the drawing. Allowing some space for operation and the steam engine from the Danby kit, I arrived at the overall size of the building floor plan. This plan was printed out in 1/4” scale and a cardboard template was made the size of the floor plan. Then it was tested in the allotted space on the layout. I found that if I flipped this cardboard template end-for-end, the sawmill would fit in the allotted area! This flip moved the log deck from one end of the plan to the other end (Fig 1). Photo 1 shows the allotted layout space for the sawmill. The base for this area was formed by cutting and gluing several pieces of Styrofoam together. The result was shaped, and scenery was added to it, to fit in the area.

All of the wood used in this model is from Mt. Albert Scale Lumber [www.mtalbert.com]. I colored all of my wood before starting construction. I like to use felt-tip pens from artist supply stores to color my wood. This particular model is colored with Prismacolor Cool Grey 50% (PM-112). Photo 2 shows the sawmill area with the 10” x 10” footings and cross-pieces in place. The 4” x 10” floor joists were installed next, and were doubled up under the carriage track. A 6x6 board was added on top of the floor joists for the Code 55 rail to sit on. These rails were treated with “Hobby Black” before being installed. The floor joists on the equipment side were spaced to give support to the husk, live- and dead-rolls. The rest of the joists were spaced equally (Photo 3). Floor-boards were added in the area of the husk.

While setting my husk, log carriage, and live-rolls in place to determine where the belt drives would go that operate this equipment, something didn’t look correct. I discovered that by flipping my cardboard template for a better fit into my allotted space, I flipped the log flow. The husk built using the Sierra West instructions assumed that you were building what I will call a right-hand sawmill. By “right-hand”, I mean that by standing on the opposite side of the carriage tracks from the equipment, the log flow is from left to right. But, my log flow is now from right to left. My sawmill is a “left-hand” sawmill. The husk, built per the instructions, is for a right-hand sawmill. My husk was built backwards! I normally used five-minute epoxy to assemble models of dissimilar materials, but this time I assembled the husk using CA. I don’t favor CA, but was trying a new brand. The husk came apart, just having to soak two or three parts in acetone to free the CA. The reassembled husk got epoxied. I took the diagram from the Sierra West instruction manual and ran it through my scanner. I then printed out a mirror image of the diagram and I had a right-hand husk. The saw is the only piece of equipment that has a right- or left-hand mode. The blade guide was the only part that had to be modified. I was able to twist the guide part 180 degrees without breaking it.

It then began to bother me that I might be building something that never existed, a left-hand sawmill. I went to the On3 chat group on Yahoo, and questioned whether such a sawmill existed. I got a reply from a noted logging expert, stating that there were two sawmills in Oregon with similar equipment and one flowed from left-to-right and the other from right-to-left. I felt a lot better about my flipped sawmill.

Two shafts extend out from under the husk, one to drive the log carriage and the other one to operate the sawdust blower. The carriage driveshaft ends just short of the log carriage track with a pinion gear on it. This meshes with a gear on the carriage drive-rope drum shaft. A hole has to be drilled in the 4” X 10” track support joists to pass this drive shaft through. The sawdust blower driveshaft has to go through both 6 x 6 boards supporting the rail. These holes were located and drilled using the husk itself. After these holes were located, the husk was glued in place. Photo 4 shows a closeup of the husk, carriage drive, and
sawdust blower shafts. The sawdust blower is just to the right of its shaft. Note the black piping from under the saw to carry the sawdust to the blower. The cable, used to move the log carriage back and forth, is 0.022” rope used for ship rigging.

The next piece of equipment I constructed was the log deck. As mentioned previously, I didn’t want a log pond (as my space didn’t allow it), so my sawmill is supplied by truck. The finished product will ship by rail. I built the log deck as shown in Photo 5. The footings and crosspieces are 12” x 12” lumber. The log deck slope boards are 6” x 12” topped with Code 70 rails to save wear and tear from the logs. The three log stops and associated steam cylinder were added with a steam line connection. I did not use the log kicker and steam cylinder that came as a part of the Sierra West Log Deck kit. The method used to get the logs up on the log deck will be discussed later.

The next equipment to be set in place are the live-rolls. After a piece of lumber is cut off the log, it falls onto the live-rolls. As mentioned before, these rolls are powered, so that the operator can move the cut lumber up to the cut-off saw in order to cut the board to the desired length. The powering apparatus for the live-rolls is located in the floor of the mill. After marking the location of the live-rolls, the powering mechanism was installed. Some sections of the floor joists had to be removed to provide clearance for parts of the live-rolls’ drive mechanism (Photo 6). Floorboards were now added to the rest of the floor area of the mill. The tables for the live-rolls and the dead-rolls were installed.

We are now at the point of building the walls for the sawmill. The cutoff saw hangs from the roof joists, and fits into the gap between the live- and dead-roll tables. Holding the assembled cutoff saw over the gap between the roll tables, the bottom of the roof joists was determined to be at a 10’ 3” height. The back walls are near the mainline of my On3 railroad, so I decided to make them solid except for a door. The end wall between the husk and the log deck was also made solid. These walls were built up using 2 x 6 studding with 2 x 12 sheathing. A few years ago, someone obtained some old paint from the railroad and the outsides of the walls were painted freight car red. The front wall of the sawmill is to be open, just using 10” x 10” framing.

At this point, I decided that the interior should be detailed before it became a problem getting to the inside. Having a Western Scale Models Machine Shop Small Tools and Accessories kit, I used some of the components from it for my interior. Extra saw blades and handsaws from Echo Mountain were also used in detailing the sawmill. Several folding chairs produced by Circus Craft were added. Photo 7 shows the model up to this point.

After these walls were in place, the cutoff saw and the log turner were installed. The cutoff saw was hung as shown in Photo 8. The log turner is used to rotate a log on the log carriage, so it is situated over the centerline of the log carriage. It and its rafters were installed, as shown in Photo 9.

It is now time to figure out how the different drive-belt
assemblies will fit into the ceiling of this building. There is a long shaft parallel to the carriage track, that contains pulleys that drive the cutoff saw, the live-rolls and the log turner. This shaft is driven by a miter gear. A perpendicular shorter shaft contains the connecting miter gear and its drive-wheel. This drive-wheel is driven by another drive-wheel from the main power supply shaft. I determined that the main supply driveshift and its pulleys were too large to be placed in the ceiling. I went back to my CAD program and designed a framework that sits over the steam engine to support the shaft and pulleys. Photo 10 shows these shafts, miter gears and the supporting framework with the Danby kit steam engine.

With the interior now finished, it is time to build the roofs. I went back to my CAD program and drew up plans for each of the roof rafters. Using these plans, I made a fixture to build the required number of roof rafters for each roof. The rafters for the small end section of the sawmill were glued in place. I added 2 x 12 sheathing on about three-foot centers to support the corrugated aluminum roofing (Photos 11 and 12). The rafters for the large roof were clamped in place with tweezers, and the sheathing was applied in the same manner. The corrugated aluminum was airbrushed with thinned gray primer followed by some thinned rust. The aluminum was then cut into approximately 3' x 6' sheets. After they were in place, they were weathered using powdered chalks dissolved in alcohol. The finished roofs show in Photo 13.

An old Hetch Hetchy kit steam boiler was installed outside the rear door to supply steam for the steam engine. I ran a lagged steam pipe from the boiler to a point under the flooring of the sawmill. Photo 14 shows the boiler.

As mentioned earlier, some method was needed to get the logs up on the log deck. My solution is a stiff leg derrick. The November, 1983, issue of the *NG Gazette* has drawings of a stiff leg derrick used on the Yreka Western railroad, drawn by Al Armitage. This was used as the basis for mine. I purchased a Keil Line stiff leg derrick kit, but the metal parts were the only pieces that I used due to the slope of the land. Photo 15 shows the derrick in place, waiting for the next truck to arrive. Photos 16 and 17 show the overall mill.

The next time you need a lineside industry for your layout and there aren’t any kits matching what you envision, design your own using available detail parts. Scratchbuilding is still
alive, it’s fun and produces a one-of-a-kind of industry for your railroad. Try it, you might like it.

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MAIN STRUCTURE MEASURES 7 1/2” X 16 1/2” LONG
Turnout Jig

Ted Horvath

My switching layout will use Code 125 House of Duddy flextrack and BK Enterprises turnouts. These products both use Micro Engineering rail, and match up perfectly. I got some BK turnout kits and found that, in many cases, the stock rails were warped with an upward bend. This may have happened when the rails were ground for the points to fit. I was not able to straighten them with any amount of clamping or reverse bending, nor could I convince myself that spiking the rails to the ties would hold them down for long, if at all. Thus, I decided to solder the rails to printed circuit (PC) board ties, which could then be attached (with screws if necessary) to the roadbed.

The turnout jig shown here was constructed to facilitate making numerous turnouts; it will make #5 and #6, left and right turnouts. The turnout jig is made of 3/8" square brass tubing, 15" long for the bases, and 3/16" square brass tubing, four inches long, for the cross members. I made a turnout tie pattern diagram and used it select positions for the PC board ties; the cross members were soldered in those positions. You may find it easier and just as accurate to use a piece of flextrack to identify the cross member/PC tie positions. I use five PC ties for a conventional turnout (one track straight and the other curved). In Photo 1, the cross members indicate the positions of the PC ties. From left to right, Positions 1, 2, 3, 4 and 6 are used for a #5 turnout, and Positions 1, 2, 3, 5, and 7 are used for a #6 turnout. The wire between Positions 1 and 2 indicates the location of the throwbar. I made the jig with one base piece flush to the ends of the crossmembers and used a handy 2-1/2" board as a spacer between the base pieces. The jig could be made with the crossmembers flush to the base piece on both sides, or overhanging on both sides. Left turnouts are made with the flush side nearest you, and right turnouts with the overhang side nearest; the jig works equally well from either side.

Clamp some PC ties to the crossmembers with suitable clamps. I use small alligator clips on the flush ends and rubber bands on the overhang ends. It is easier to cut electrical isolating gaps in the PC ties before, rather than after, the turnout is made. Using track gages, solder the turnout components to the PC ties; do not solder the point rails to the PC tie in Position 2. Photo 2 shows a completed #6 right-hand turnout on the jig. When soldering is done, remove the clamps, pop the turnout off the jig, and trim the PC ties to appropriate lengths.

Although the initial reason for using PC ties was to deal with warped rails, a secondary benefit occurs which, in itself, makes the jig worthwhile. Once soldered to the PC ties, the turnout rails are permanently in gauge. This opens up several options. You can spike the turnout to ties that have been secured to the roadbed, or spike the turnout to ties and later drop the whole assembly into place. Since the rails are fixed in gauge, track spikes do not serve a structural purpose and become essentially ornamental. This greatly simplifies and speeds the spiking process, and allows you to use small spikes for a better appearance.

Although it takes a bit of time to make this jig, the convenience and speed it gives to making turnouts will repay the initial effort many times over. Good luck and have fun!
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Building a Small O Scale Layout
Part Fourteen
Michael Culham

Our walls are all done and ready to be put together into a finished building (Photo 1).

Before doing this, there are a few things that have to be done. The first is the glazing in the windows. To do this, I took some clear 0.015” styrene sheet, cut it into panels measuring 2-1/4” x 3-1/2”, and laid them over the window areas on the back of the walls. Then ran some liquid plastic cement around the edges; the cement will creep in under the sheet and bond it to the walls (Photo 2). The next step is to take some 0.125” x 0.125” styrene strip and glue it along the joint line between the cornice and the wall material (on the back of the wall, of course). Photo 3 shows this step; these strips are necessary to support the roof when we get it made. The last thing I do is to paint grimy black paint onto the backs of the window glaze (Photo 4). This keeps you from seeing into an empty building. Now, if you are very ambitious, you could make a full interior for your factory and not paint the backs of the windows. Me? I’ll paint them. By the way, in Photo 4 you can see that I painted the brick color along the top inside edge of the wall, above the roofline. This is only done on Wall #1, because it is the only wall you can see the back of.

With all these little chores out of the way, we are now ready to put the walls together into a building. 

Putting the Building Together

The first thing I did was to glue Walls #1 and #2 together (Photos 5 & 6). Then, I did the same with Walls #3 and 4. These are the walls that are at right angles. In Photos 7 and 8, you can see that I used some large X-Acto clamps to hold the wall sections while gluing them together. This helps to hold them at right angles, as well as holding them tightly together for a strong joint. With the walls clamped, I ran some liquid plastic cement down the joint, then glued a strip of 0.125” x 0.125” styrene along the inside joint to help support it. Once the glue has set, remove the clamps. I had a slight problem with a gap at the corners of Walls #1 and #2 (Photo 9). This was quite easily fixed by a trick I learned years ago. Make a downsput to run along the gap, using a piece of wire or styrene rod (Photo 10). No more ugly gap.
Next we have to glue walls together at the joint between Walls #2 and #3. To make sure that I have the angle, I put all the walls together in the location on the layout. This way, I know that the wall angles are correct. I then clamped the walls together, ran some glue down the joint, and let it dry. Our building walls are all together now (Photo 11), but there are still some things missing, like the roof and the shipping docks.

**Making a Roof**

Remember back in Part 11 of the article, I said you needed a large sheet of 0.040” styrene (2’ x 1’)? We’ll use that to make the roof. Put the building upside-down onto the styrene sheet, aligning the edge of Wall #1 to the corner of the sheet and running the same wall along a straightedge (Photo 12). Now, trace along the inside of the walls with a pencil (Photo 13). Once this is done, cut out the roof section from the sheet and glue it into place on the building (Photo 14). When the glue sets, you can paint it with Polly Scale Grimgy Black paint (Photo 15). I find that this color gives the effect of a tar-and-gravel roof.

Now, it’s time to add some details. As you can see in Photo 16, I’ve put on some roof vents (Berkshire Valley #409 Cyclone Vents) and a chimney made from two Grandt Line chimneys spliced together. The last detail is a water tower, which is made by Walthers for HO. It is assembled per the instructions, and the only modification was to cut out every other rung on the ladder. I painted it in the same green as the windows and doors. Well, the roof is done, so now we’ll turn our attention to the docks.

**Making the Docks**

The two docks that you can see in Photo 17 are made from some scraps of styrene. The top is made from 0.060” thick sheet and the sides and front are 0.040” thick. Photo 18 shows you how they are made. The dock can be made to whatever size you need; if you want one to run the length of the wall, go ahead. Mine were made to be a little wider than the dock door. I painted them with Poly Scale Concrete, then gave them a chalk wash once the paint had dried. They were then glued in place. The other little detail is the two lamps over the docks, made from Grandt Line lampshades and a piece of brass wire. Once they were painted, a hole the size of the wire was drilled into the wall and the lamps secured with CA glue.

The building is now finished, put into place and the scenery around it finished off (Photo 19). As you have seen from the four parts of my article, constructing a DPM building is not that difficult. All that is needed is a little patience and time. About 25 hours was spent making this building but, as you can see in Photo 20 on the next page, it was worth it. Although it is a backdrop building, it adds so much to the scene.

We have covered trackwork, scenery, and buildings so far in this series. The one thing that is still missing is something that everyone will need on their layouts. We need roads for the automobiles. In the next three parts of this series, I will show you how to make grade crossings, and how I make and finish roads.

So until next time...

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New...GP-15's, RSD-15's, RS-3's...$195
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SD-35, WM, N&W, SOU, CNJ, B&O...$249-$309
GM-9's, C&O, RDG, WM, UP, GN, more...$249-$379
Dash 8's, CSX, NYSW, UP, SP, BNSF...$249-$309
GP-60, C&O, 245-252-630, SD-40, GP-9...$379-$419
SW-6's, RR, LV, RDG, CNJ, DL&W...$229-$299
MTH...PRR H-3...$649, K-4...$599, CNJ P-47...$749
Weaver...USRA Light Pacific............$495
VO-1000, B&O, CNJ, LV, RDG, WP, MILW...$199
RS-11, C&O, CNJ, ME, PRR...$199...$199
Shaft drive RS-3's, FA/PB's...$99-$150

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PRR, RDG, SP, UP, WAG, WM, more...$40-$55
40' Steel, Erie, NH, PRR, NYC, CNW, GN, more...$47-$55
40' Trainman, B&M, MEC, MP, NYC, L&N, PRR...UP, more...$37
X-29's...$35-$45
HyCubes...60', 75', New...40', 50', 60', DH, NH, L&N, NY, MH, more...$45-$55
53'...Aloha, Purina, B&M, BN, IC, CNW, FEC...$35-$49
60'...C&O, CSX, B&O, EL, RG, SO, NW...$40-$50
Weaver...ACL, ACY, B&O, B&M, CNJ, CNJ...CP, CV, CR, DH, T&H, SO, OC, CN, IC, RDG, LV, PC, L&N, MEC, MP, CNJ, NH, PH, PHD, more...$20-$30

Refrigerator Cars - 2 rail
Weaver/Crown...B&M, BN, CV, CN, NYC, NEA, Dubuque, NM, Refrig, WIF, PRR...25+ roads...$20-$30
57 Mech...PFE, BN, WFE, T&O...10+ roads...$35-$45
Atlas...40' steel...CAR, B&O, AT, DLW, $55
36' & 40' wood, Erie, NH, PRR, NYC, CF, FPE...$25-$35
Meats, beers, foods...25+ billboards...$45-$75
40' plug door...PRR, WP, DTI, REA...FGE, CNJ, NP, ATS, NFC, SSW, ART...more...$37
K-line...PFE, MD, CNW, 15+ billboards...$35-$40

Covered Hoppers - 2 rail
Weaver/Ps-2 and Ac-2...BN, CBQ, CNW, CP, PRR, LNE, DLW, B&O, C&O, EL, NW, NH, NYC, more...$20-$30
50' Centerflow or Grain...CR, CP, LV, NY, PRR, RI, Rainbow, Dupont, ADM, Amoco, Arc, UP, more...$20-$25
Atlas...ACF-C&F, Erie, DLW, GN, SP, WM, more...$55
New...3 bay...UP, CBQ, B&telite, Cheese...$37
Cylindrical DLW, GN, CR, PRR, WAG, SSW, $35-$45
Aislife...LV, DH, CSX, PRR, Erie, RG, SF, $40-$50

Hopper Cars - 2 rail
Atlas...New...3 bay...WM, C&O, SOU, BN...$37
Ore cars, CN, UP, DM...$25, H21a...PRR...$58, PC...$45
2 bay...PRR, NYK, Rut, P&S, CNJ, Rewind, more...$45-$52
Weaver...2...3, 4-bay, 30+ different roads...$20-$30

Tank Cars - 2 rail
Weaver...40' & 50', new, old, 20+ roads...$30-$35
Atlas...33K, CNX, GLNX, Union Tex, Sub Propane...$49
17K, Diamond, Hooker, Stuhr, ACF, SHPX, $55-$60
8K...B&telite, NE Alcohol, Phila Oto, 10 more...$50-$55
11K...SHPX, UT&X, Hooker, Solvay, Spencer, 10 more...$55

Flat Cars, Stock Cars
Atlas...Double stacks...$125-$169
Containers...$10-$25
Front runner...$45, 80' flats, $50-$65
Trailers...$25-$35
Stock cars, UP, MKT, D&G, CNW, GN, PRR...$25-$37
Weaver...Flat and stock cars...many roads...$20-$30

Gondolas - 2 rail
Atlas...40' composite, PRR, NYC, B&M, MP, C&O...$32
50'...B&O, CNJ, NW, NH, PRR, RDG, UP, LV, $37
Wvr...CNJ, PRR, LV, RI, SF, UP, Rdg, NW, SOU...$27

Cabeese - 2 rail, 3 rail scale
Wvr...CD, RDG, DH, Etna, PRR, Moton, more...$25-$45
K-line...B&O, EL, NYC, SOU, SF, UP, more...$48
Atlantic...PRR, EL, NY, AK, CNJ, NH, more...$45-$60
Atlas...RFP, Rut, RG, NH, SF, 15+ roads...$37-$70

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Mar/Apr '07 - O Scale Trains
Jigs

As outlined in the last issue, I’m scratchbuilding a modern boxcar. I’m also taking the time up front to build (and, in some cases, rebuild) several jigs that will help the project go much smoother.

A lot has been written about using jigs as modeling aids when scratchbuilding, and I couldn’t agree with the practice more. Some folks may feel that constructing a jig is a waste of time. Nonsense! Anytime you have to make more than one of an item, you’ll actually save time by using a jig. For example, I’ve made jigs for doing grab irons, one right- and one left-hand jig for aligning and drilling the holes in the car sides, and a third for forming the grab iron itself. The hole-drilling jigs have stops on the back to line them up properly on the car side. I’ll do another one for the stirrup steps and maybe one for the door components. I’ve even thought of doing up a jig to line up the ribs for the car sides. None of them are fancy, just some scraps of styrene built to the proper dimension. The photos will tell you all you need to know.

The jigs are a good place to record the size of wire used for the grabs and the drill bit size needed for the holes; just write it all down on the jig face with a sharp permanent marker. All sorts of other useful information could be noted on them as well. If you’re like me, your memory gets creative as the years pass, and these little bits of information get lost.

If you do build a jig or two for a project, there’s no sense in building one if it’s inaccurate in some way. You’ll just be duplicating your error throughout the model. Take the time to get it right in the first place, even if it means having to redo the thing several times. I’ll have to do that with the drilling jig, as I found an error in the rib spacing on my mockup of the carside. Time spent up front to get things right will be time well spent, and make the modeling process more enjoyable.
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<table>
<thead>
<tr>
<th>Lodgepole Scale Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale for 90’ Tree</td>
</tr>
<tr>
<td>N-Scale 1:160</td>
</tr>
<tr>
<td>HO-Scale 1:87</td>
</tr>
<tr>
<td>S-Scale 1:64</td>
</tr>
<tr>
<td>O-Scale 1:48</td>
</tr>
</tbody>
</table>

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Mar/Apr '07 - O Scale Trains • 33
## 2-Rail Steam

<table>
<thead>
<tr>
<th>MTH 2-Rail Locomotives</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSF Northern</td>
<td>$1150</td>
</tr>
<tr>
<td>CNJ Blue Comet</td>
<td>$1200</td>
</tr>
<tr>
<td>CNW Streamlined Hudson</td>
<td>$900</td>
</tr>
<tr>
<td>C&amp;O Greenbrier</td>
<td>$975</td>
</tr>
<tr>
<td>C&amp;O Steam Turbine</td>
<td>$1100</td>
</tr>
<tr>
<td>KNP Berkshire</td>
<td>$1100</td>
</tr>
<tr>
<td>PRR T-1 46110</td>
<td>$1200</td>
</tr>
<tr>
<td>UP Big Boy 4-8-8-4</td>
<td>$1350</td>
</tr>
<tr>
<td>UP Gas Turbine 3 units</td>
<td>$850</td>
</tr>
</tbody>
</table>

## Weaver 2-Rail Brass

| PRR K4 F/P Early      | $1100 |
| PRR K4 C/P 35'-41'    | $1400 |
| PRR K4 C/P 42'-57'    | $1400 |
| PRR L1 F/P            | $950  |
| RDG G1sas Crusader    | $1200 |
| RDG Crusader 5-car passenger set-as-built | $750 |
| RDG Crusader 5-car set with corrected glazing and shades | $950 |

## Other 2-Rail Brass

| USH PRR K4 C/P Full Striping | $1650 |
| UCH NYC Dreyfus Hudson      | $1850 |
| OMI MILW 4-4-2 Hiawatha C/P | $1750 |
| PSC SOU Ps4 F/P Cresc. Ltd. | $2500 |
| WMS L5 Yugoslavian C/P      | $750  |
| WMS SP Daylight 4-8-4 F/P  | $1100 |

## 2-Rail Diesel

| Atlas GN SW8 Green/Orange | $350 |
| MTH PRR Centipede         | $1250 |
| MTH ATSF F3 Warbonnet paint | $500 |
| MTH T&P GP9               | $325  |

## 3-Rail Scale Steam

<table>
<thead>
<tr>
<th>Lionel Tribb</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sou Ts-1 4-8-2 detailed</td>
<td>$1000</td>
</tr>
<tr>
<td>N&amp;W Class A-2-6-4/NB</td>
<td>$1000</td>
</tr>
<tr>
<td>NYC Custom J1e Scullin disc PT Tender</td>
<td>$1400</td>
</tr>
<tr>
<td>N&amp;W K2 4-8-2 custom</td>
<td>$1250</td>
</tr>
<tr>
<td>N&amp;W K3 2-8-8-2</td>
<td>$1250</td>
</tr>
<tr>
<td>VGN 2-8-4</td>
<td>$1000</td>
</tr>
</tbody>
</table>

## Weaver

| PRR Std K-4 F/P | $950 |
| PRR K-4 C/P Early Low Tdr Stripping | $1450 |
| PRR K-4 C/P 36-41 Condensed Ltr | $1250 |
| PRR K-4 C/P 41-47 Expanded Ltr | $1250 |
| PRR K-4 C/P 47-57 Modern Solid Pilot | $1350 |
| NH 4-4-2 w/Sliseco, long vandy tdr, sound, smoke | $1500 |
| PRR A-3 0-4-0 F/P | $800 |
| RDG G-1sas Crusader | $1100 |
| RDG Matching Crusader Cars | $600 |
| SOU C/P 4-8-2 Grm Stripes | $1500 |
| B&O &Co T-3 W/Vandy Sound Smoke | $1750 |
| WM H-7 C/P Dull All # | $750 |
| C&O 2-8-0 C/P Dull | $750 |
| UP *49er XL 4-6-2* | $1100 |

## Williams

| RDG L5 Camelback C/P | $750 |
| PRR E-6 C/P Late #6513 | $950 |
| PRR B-6 C/P Dull #5244 | $750 |
| PRR L-1 C/P West Tdr #714 | $950 |
| PRR L-1 C/P West Tdr #7345 | $1100 |
| PRR K-4 Custom Modern #646 Sound Smoke | $1250 |
| SOU Ps-4 Custom w/Elesco system Green w/stripes #6689 | $1250 |
| N&W Class A 2-6-4-4 Detailed | $1350 |
| N&W 4-8-4 C/P #600 "dull" | $650 |
| B&A 4-6-4-4, brass, upgraded | $750 |

## Widebraid

| RF&P Custom Governor 3-Rail Conversion Sound Smoke Stripes Logo etc. | $2750 |
| ASFT Northern | $1200 |
| GN S-2 4-8-4 Glacier | $1200 |
| Sou Custom 4-8-2 Grm w/stripes, Weaver motor and chassis, #6693 | $1650 |
| N&W K3 4-8-2 Water Buffalo | $1300 |

## MTH

| ACL 4-8-4 Custom Mod B-Wheel Tender #1801 | $1650 |
| ACL Custom 4-6-2 | $750 |
| ACL 4-8-4 Greenbrier | $975 |
| C&O Custom Greenbrier Early #605 | $1250 |
| C&O Kanawah 2-8-4 W/Psgr Announ | $1250 |
| DM&WR Yellowstone | $1650 |
| N&W Class A Custom #1216 Correct & Detailed | $1500 |
| N&W Streamlined J 4-8-4 | $1100 |
| NYC Dreyfus Hudson | $975 |
| UP Northern #8444 | $1250 |
| PRR T-1 Duplex #6110 | $1250 |
| C&O Custom Greenbrier #6689 | $1250 |
| N&W 4-8-4 w/Vandy Tdr | $1100 |
| PRR Custom G-5 #5720 W/Brass Tdr | $1100 |
| PRR K-4 Modified As K-3 C/P #9999 | $1000 |
| RF&P 2-8-4 Custom Modified W/striping | $1450 |
| WM H-9 2-6-0 c/p duml #802 | $950 |

## 3-Rail Scale Diesel

<table>
<thead>
<tr>
<th>Lionel</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sou AA Custom Painted</td>
<td>$650</td>
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<tr>
<td>L&amp;N AA</td>
<td>$450</td>
</tr>
<tr>
<td>CB&amp;Q AB</td>
<td>$550</td>
</tr>
<tr>
<td>ACL AB</td>
<td>$550</td>
</tr>
<tr>
<td>AMTK DASH 8 #509</td>
<td>$395</td>
</tr>
<tr>
<td>C&amp;O RS-1</td>
<td>$375</td>
</tr>
<tr>
<td>N&amp;W SD-35</td>
<td>$375</td>
</tr>
<tr>
<td>UP SW-9</td>
<td>$350</td>
</tr>
<tr>
<td>VT (Wash, Terminal) RS-1</td>
<td>$400</td>
</tr>
</tbody>
</table>

## Lionel

| EL Alco PA A-A w/fact. sound | $575 |

## Williams

<table>
<thead>
<tr>
<th>Custom E7 Diesels - All with fixed pilots, scale lead couplers and diaphragms.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACL AB</td>
<td>$550</td>
</tr>
<tr>
<td>B&amp;M A unit</td>
<td>$300</td>
</tr>
<tr>
<td>CB&amp;Q AB</td>
<td>$550</td>
</tr>
<tr>
<td>L&amp;N AA</td>
<td>$450</td>
</tr>
<tr>
<td>Sou AA Custom Painted</td>
<td>$650</td>
</tr>
</tbody>
</table>

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Reader Feedback

Useful Info for the Transition

I used Ted Byrne’s simple DC rectifier set-up (November-December Issue) to temporarily power the layout sections as I convert to 2-Rail since all of the two-rail locos I have acquired are traditional DC control. I use it in conjunction with a Troller Tiller II power supply intended for 3-Rail. I was concerned about getting a power supply to keep the transition moving, but this works fine. Thanks.

The long letter containing recommendations on techniques for flextrack installation was valuable. Also it would be interesting to have a detailed description of the construction technique used on the industrial flats in the three-rail layout featured, although the Maxted Harpsichord factory was interesting in that it did address some methods for the building flats.

Von Richards (via email)

…and About That 3-Rail Content (#1)

In Issue #30, several readers and the publisher commented on the inclusion of an article by a Hi-Rail modeler. I first heard of this magazine on a three-rail forum and subscribed to it when I could not find it in our local hobby shop or bookstores. I feel that I can learn from any publication about trains, model or real. I read OST, MR, RMC, CTT, OGR and any others that I can find.

The tone of several letters was belittling, seemingly, of anything that did not fit a given mold. The publisher made his thoughts, at least to me, very clear. It does not bother me if CTT or OGR runs something 2-Rail. I don’t think our hobby is so large that we can ignore or belittle an aspect of our hobby in which we do not directly participate. I will continue to enjoy OST and play with my trains.

Roger Roush (via email)

3-Rail (#2)

“Celebrating the Art of 1:48 Modeling”, where have I seen this in print before? Ah yes its stated proudly on the front cover of every issue of O Scale Trains. As I see it, It’s a mission statement of sorts for your fine magazine. I think this feeling is concurred by many of your readers as we respect any modeler celebrating their art of 1:48 modeling, be it in 2-Rail standard-guage or Proto48, outside third rail, On3, On30, monorail and yes even 3-Rail. I think anybody that creates their railroad with scale equipment in a scale environment with detail and realism such as Norm Charbonneau’s layout is worthy to grace the pages of this magazine. So Joe, I wouldn’t worry about anybody being so narrow minded as to ask for your head over Charbonneau’s masterpiece of 1:48 modeling. I could definitely see hint of influence reminiscent in the modeling style of George Selios’ Franklin & South Manchester Railroad. Norm, we celebrate with you on outstanding modeling skills reflected in your Greenbrooke Central Railroad. I do hope you also share with us in future issues how you used Dan Machesky’s scratchbuilding ideas to turn out some very convincing images. Great photos! By the way who gets credit for the photography? Lighting was great!

Walter Horlacher, Coral Springs, FL

3-Rail (#3)

I wasn’t going to renew my subscription until I just received your latest issue (#29). The material content became much more relevant to what I want to read about. I’m a 3-Railer and most any railroad publication, regardless of scale, usually is interesting to me. I even subscribe to an N Scale magazine because of their photographic efforts that help illustrate scenery or some other subject.

Anyway, I’ll try your magazine for another year and see how the content develops during that period.

Michael Schafer, HI

3-Rail (#4)

I think your selective use of truly high level three-rail layouts is great.

In fact, other than the middle rail, I doubt your readers can tell one from the other. We know you can’t please everyone but to exclude fine examples such as Norm Charbonneau or the Cheryl Valley would do a disservice to many of your readers. I learn from both camps. In my opinion, this “scale thing” can be carried to the extreme as evidenced by the reference to the various rail codes used by some modelers. There must be room in this hobby for those of us who appreciate highly skilled modeling, regardless if it is 2- or 3-Rail.

D. Gauss (via email)

3-Rail (#5)

In the last ten years, the so-called “toy trains” and the modelers who use them to create model railroads, have advanced the art of modeling by using scale (except for wheels) models and have used the available fine buildings, scenic treatments and excellent track plans to create fine model railroads. On the other hand, 2-Railers have been buying and promoting ready-to-run equipment, ready-to-lay track and other fine items offered by ever increasing manufacturers to create fine model railroads. As shown in the articles you have chosen to print, the line between “toy” and “scale” has virtually disappeared. While I am most interested in seeing articles about my chosen corner of the modeling world, it is always a treat to see fine modeling by anyone using whatever they choose to use. Your treatment of the 3-Rail articles showed examples that any modeler can use to improve his own creations. It is true that 3-Rail articles have good coverage in other magazines, but that does not preclude publishing quality modeling in this magazine.

Second subject: your opinion piece about the NMRA. I don’t remember it ever being stated better. That organization needs to present themselves in such a way as to attract modelers not reformers. “Show me the money.”

Gerald Brothers (via email)

3-Rail (#6)

I re-entered the model train hobby in 1997 after an absence of about 40 years since completing a Lionel layout at age twelve. I began by collecting MTH Premier 3-Rail “scale” locomotives. As my knowledge and interest redeveloped, I built a 12’ by 8’ Hi-Rail layout that was, for me, a learning experience in most aspects of “near scale” model railroading. Space limitations constrain me to work in 3-Rail although I would prefer 2-Rail. I suspect that most readers of OST, like me, appreciate O-gauge “scale” model railroading irrespective of whether it is done on two or three rails. Therefore, I see no reason why your excellent magazine should not include both.

Mel Garelick, Trumbull, CT

3-Rail (#7)

Just got the latest issue and I thought I would write one of the hundreds of notes you will get encouraging you to continue to feature impression layouts like Norm’s, whether 2-Rail or 3-Rail scale, in future issues for the following reasons:

(continued on page 38)
• Terrific inspiration and just plain fun to look at
• The magazine is O Scale Trains not 2-Rail Scale Trains.
• I model in 3-Rail scale, and enjoy seeing layouts in both 2-Rail and 3-Rail, the scenery and buildings are an inspiration.
• Most of your “how-to” articles are appropriate for my layout, too.
• Most of the layouts you feature actually have pictures in which one can’t see the number of rails, including pictures in this issue. If these guys think modeling is all about the number of rails in the picture, say the center spread in Issue #23, they are missing the point of O Scale Trains.
• I subscribe to the magazine.
• I buy from most of the suppliers that advertise in the magazine, and, as said countless times before, without us 3-Rail scale guys buying products from these manufacturers, there wouldn’t be enough of a market of just 2-Rail scale buyers to support the hobby.

I wish these guys would chill.
E. Campbell, Calif.

3-Rail (#8)

After several years taking your magazine, I will decline [to renew] because of your Hi-Rail/3-Rail bias.

E. Campbell, Calif.

3-Rail (#9)

I was going to let sleeping dogs lie, but you asked in “Observations” regarding the 2-Rail versus 3-Rail articles issue, so I will respond. My criterion is whether the article contributes to my knowledge in some aspect of the hobby. If someone tells us how to build a really great structure or background, and his layout happens to be inside or outside third rail, I will not complain. We have learned much about modeling and operations from the past masters who worked in outside third rail (Armstrong, Ellison). I collected a number of articles by Thornburgh from the NMRA Library back when I was a member. Surprisingly some of his locomotives were built for third rail -- yet I learned a lot about met-alworking for model building from all of those articles.

The cautionary note here is to avoid the OGR approach of having only articles that are about layouts which are merely display sites for collections of three-rail RTR equipment, track and structures off the shelf. If there was even an operating scheme presented, it might have redeeming value -- but these are more like extensions of the product reviews. That is why I stopped subscribing about ten years ago. Many of the vendors in which I would have interest would not advertise in OGR. Of course, I like craftsman kits and articles on constructing rolling stock, buildings or trackwork.

By the way, the revision of your layout in the OST Blog would have been worthwhile for the magazine. I wondered how that was coming along.

Von Richards (via email)

3-Rail (#10)

On Page 20 of OST #30, you published three letters from readers opposed to material about 3-Rail. I do not regard a one-page Hi-Rail column, occasional articles about well-sceniced Hi-Rail model railroads, or articles about converting three-rail O Scale models to 2-Rail as heresy or any kind of threat to the 2-Rail way of life.

The wide variety of commercial products available in O Scale today is a direct result of the increasing number of Hi-Railers. Some of these people, I believe, are supporting the O Scale magazines because they want to learn more about scale modeling. I see no need to exclude or offend this group of serious modelers (who happen to run on three-rail track). After all, the primary content of [other O Gauge magazines] is material related to toy trains, their layouts (as opposed to model railroads), and the collecting of toy trains.

I think that many 2-Railers today are senior citizens that have built their layouts and are well-saturated with models and un-built kits, not buying much new product. This group is thus providing little or no support to the commercial O Scale manufactures and doesn’t really need most of the information provided by the O Scale magazines. If the magazines are to remain viable and able to grow, they need to appeal to younger modelers, who are actively building and buying, including HiRailers. After all, some of them may eventually become 2-Railers!

J W Mathews, by email

(...and that is the end of that discussion in OST. -Joe G.)

Looking for O Scalers in Nevada

I am a life member of the NMRA and would like to set up a club in Pahrump, NV, that could meet and share ideas and have a show every once in a while. If there are any of you in Pahrump or out that way please drop me a line and maybe we can get together and have a train show in this town. If there is enough interest we could have a layout somewhere in this growing town.

Dan LePage
[dan@emeraldstationstudios.com]

A Staggering Photo

Read your “Easements” column in Issue No. 30 that arrived this afternoon.

Another great issue! Prototype railroads also have the problem of joining rails of different weights and heights (versus codes). They use special compromise rail joint-bars, made to fit left and right sides for the various sizes of rail that meet.

Attached is a photo I shot in 1997 of a compromise rail joint on the B&O in Ohio, where 85 lb. per yard siding rails meets the 110 lb. per yard mainline rails. The compromise rail joints are directly opposite each other on the same tie, rather than staggered as in the usual US practice. Note the rail bonds for the signal circuit as well!

Ed Bommer

Central Update

Thought I would give an update to what’s happening with “Central” these days. We have moved the shop to a new location but are still working on getting the place powered up. We are able to satisfy some small part orders for now, but orders for built-up locomotives won’t be processed until sometime early ’07.

The website will be down for a time as we are working to update it.

We have had several inquiries for the AAR-A (switcher) truck kits lately. The patterns for this truck are being updated and as soon as everything fits up, we will order castings for stock.

We will be offering the entire steam line for sale again in the near future. Patterns, molds, dies, etc., for the Ps4, H-10, “X-Series” parts, as well as the 2-10-4, USRA Heavy Mike, NYC L2a, will be included. The stock is a mix of Central, Saginaw, Scale Craft and several pattern makers who supported the Central business under Bob Smith’s ownership.

Plans for new Diesel models have been put on hold for the time being, but we will continue to produce current catalogued models (starting in early ’07).

Re-power gearbox orders and “2 ralling” of other manufacturers’ models are
the larger part of Centrals’ business these days, rather than the high-priced brass sales of times past. The newer 3-Rail scale stuff has shined a lot of light on O Scale, especially with affordability. We think there’s still a niche for Central.

Best to you and yours!
Lou Houlemarde, Central Locomotive Works, PO Box 401231, Hesperia CA 92340
clw2000@earthlink.net

A Different Turn
I loved the article about constructing the turntable (OST #29). It’s filled with good ideas. The only thing I question is the method of transferring power to the turntable. Here are two alternatives which I think are easier to build and more reliable:

(1) Cut short pieces of copper water pipe and glue them onto the wooden dowel (for insulation). Arrange wipers to carry current to the turntable. For a third circuit for lights, just add one or two more pieces of copper pipe.

(2) Go to Radio Shack and get the following parts: #274-0893 Adapter, $5. This has a male stereo plug on one end and two female mono jacks on the other. #042-2548, Y-cable, $6. This has a female stereo jack on one end and two 15-inch cables with male mono plugs at the other. Plug the stereo plug into the stereo jack and the two mono plugs into the two mono jacks, forming a loop. Cut the two cables anywhere in the loop. Voila!! You now have a rotating electrical union with three conductors. This is sufficient to provide track power and lighting to the turntable, if you use a common bus or common rail system.

Neither of these methods provides for reversing the polarity when the turntable rotates, but I don’t consider that necessary. I prefer to use a separate reversing toggle switch for the turntable.

I would use a momentary-contact switch with a spring-return to “off” or “open” to operate the turntable. I would also use a momentary switch for each stall track. I think this would be easier to operate and far easier to build and wire. It’s fool-proof; you can’t leave the wrong stall track “on”.

Ed Miller, Broomfield, CO.

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Are You a “Real” Model Railroader Yet?

In my opinion, you might be a collector, model designer, manufacturer, importer, dealer, modifier, painter, repairer, kit builder, kit-basher, scratchbuilder, layout planner, electronics expert, railroad historian, researcher, writer or even an editor, but you do not become a real model railroader until you actually install miniature tracks between a terminal and a destination and operate a model train on those tracks. Even a run of only a few feet makes you a real model railroader in my book, and it tends to keep you enthusiastic about expanding. Of course, there are a lot of choices to consider before you decide what kind of model railroader you really want to be.

What’s Your (O Scale) Pleasure?

If you read O Scale Trains Magazine regularly, you obviously have an interest in standard-gauge trains. If you read this column even occasionally, you might have at least a bit of interest in narrow-gauge trains. However, have you ever considered just what really gives you the most pleasure in our O Scale hobby?

There are so many facets to model railroading that it is unlikely any two O Scalers will share exactly the same interests in the same order. Whether you are primarily a standard-gauger or a narrow-gauger, you might learn some interesting things about yourself by copying this page, circling the features that most interest you, and then listing them in the order of importance to you. It might verify what you already know, or it might help you to make some important decisions in the future.

Interest Choices for an O Scale Model Railroader

Railroad Location – Asia, Africa, North America, South America, Europe, Australia, other

Scenery – mountain, snow, tunnel, snowshed, hill, valley, forest, flat, desert, seaside, riverside, port, city, town, village, ceramic village, industrial, farm, trackside, underground, other

Era – early steam, late steam, transition, early Diesel, contemporary, future

Railroad Type – Class 1, Class 2, Class 3, regional, shortline, high-speed, multiple mainline, single mainline, industrial, traction, mass-transit, trolley, tourist, museum, other

Prototype – early railroad, fallen line, merged line, shortline, industrial, imaginary, fantasy, other

Gauge – wide, standard, narrow, multiple, mono, Proto-48, Hi-Rail, other

Motive Power – human, animal, gravity, steam, air, electric, internal-combustion, geared engine, other

Passenger – high-speed, long-haul, commuter, public transit, excursion, amusement park, other

Freight – long-haul, unit, container, dedicated, peddler, mixed, other

Primary Commodity – gasses, liquids, chemicals, forestry, mining, raw materials, coal, ore, aggregate, manufactured goods, military, containers, trailers, mixed, other

Layout Size – special display, club (large, medium or small), personal (large, medium or small), demonstration, module, micro, other

Layout Style – island, around-the-walls, modular, multi-level, hidden staging

Layout Features – continuous run, point-to-point, major engine facility, major passenger yard, major passenger terminal, major freight yard, multiple and smaller yards, realistic switching operations, steep grade, empties-in/loads-out operation,

Fellowship – conventions, shows, clinics, meets, round-robin, Internet, lone-wolf, other

Control – central tower, multi-cabs, walk-around, AC, DC, DCC, battery, radio, computer, electronics, signals, sound, lighting effects, night operations, other

Kit Assembly – locomotive, passenger, freight, maintenance, structure, figure, animal, vehicle, machine, ship, boat, super-detailing, custom finishing, custom lettering, other

Modifying Equipment – trucks, couplers, super-details, motor upgrade, lights, interior detail,

Other – computer simulation, recreate childhood memories, tribute to a family railroader, photography, scratchbuilding, more

There might be some overlap, and I might have left out some obvious points, but there is enough here to give the modeler who wants to become a real model railroader lots of choices to ponder. In the next issue of O Scale Trains Magazine, I will include all of my choices in the order of their importance to me. I’ll also be pleased to include any that are sent in to me by any “real” model railroaders or anyone who is preparing to become a real model railroader. Remember, this is only my opinion and my interpretation of a real model railroader. Your views might be different.

Happy trains to you until we meet again. ♦

---

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One of the “issues” that came up during the development of the trackplan for the Coal Creek Railway (the OST layout) was how to scenicly treat the upper and lower tracks. There is little horizontal separation between them, and they cross at a very oblique angle (Figure 1). On the actual layout, the overpass ended up over top of that switch on the lower level, further complicating the scenic treatment.

Having lived along the Pennsy mainline for many years, stone walls abound in my area, and there is the famous PRR stone viaduct that carries the mainline into central Philadelphia. So, it was no stretch to imagine stone walls supporting the upper track.

I set about looking for commercially available stone walls in O Scale. The real stones I measured in the opening photo above were two feet high and ranged from four feet to six feet long. I needed about 30’ of wall and they would have to be flexible to curve with the trackwork. I found nothing that met all those criteria, so I decided I would have to make them myself.

Wondering how I would do this, my eyes fell upon the 1/4” thick sheets of styrofoam that I had purchased at Home Depot to use as subroadbed. These sheets are two feet by four feet, and come in a fanfold of 50 sheets for about $30. A quick test determined that I could easily scribe the sheets to represent the mortar lines between the stones. I gave my test sheet to my wife, Jaini, and asked her (She’s the artist of this duo!) to “make this look like stone”. She did, and now I’m here to tell you how we did it.

I marked off four feet of elevated trackbed, and measured the height from the base at every foot. I added two extra scale feet, so the wall would be above grade. I cut one 2’ x 4’ sheet of styrofoam from the fanfold and squared off the bottom edge (Photo 1). I marked off every foot along the bottom and plotted the height corresponding to the elevated trackage (Photo 2). I then trimmed the panel to height, using a straightedge along the height tick marks and a utility knife.

Next, I measured off each 1/2” along the edges. This represents the grout lines between courses of two-foot high stones (Photo 3). By the way, I used a depleted felt-tip pen to scribe the grout lines. It gave me the best lines without tearing the styrofoam.

Using a T-square, I marked off the vertical grout lines varying the width of the stones slightly so that all the vertical lines do not line up. This makes the walls look much more realistic (Photo 4).

It takes about an hour to scribe one panel. I recommend wearing latex or silicone gloves as you will get some ink from the pen on your hands and forearms.

I choose to join the individual panels with pilasters, rather than try to notch the panel ends and fit them together. My pilasters are trapezoidal in shape. Each one is six feet wide at the base and four feet wide at the top, regardless of its height. Grout lines were scribed in the same way as the panels.

At this point I turned the panels over to Jaini for painting.
All the paint used was latex based so it would not dissolve the styrofoam. She gave every panel a base coat of a light tan, to serve as a background color and grout (Photo 5). Next came a coat of burnt sienna, to serve as the base color of our rocks (Photos 6 & 7). Then, she did a wash of dilute black over the entire panel. We didn’t feel this was enough “weathering”, so she followed that with a wash of dilute grey. The result is shown in Photo 8.

With all the panels and pilasters painted, it was time to deal with the overpass. I decided that a plate girder bridge would look “right”, supported by the stone walls at each end. I also made a stone wall panel to go under the bridge. This was installed first, and secured with hot glue (Photo 9). Then, the right side and left side stone walls were attached to the elevated track, again with hot glue, and the pilasters installed (Photo 10).

The plate girder bridge is just a facade made from 0.040” styrene sheet and strip. It is four feet long and attached with
hot glue to the splines that support the elevated track. You won’t be able to see the bridge from the other side of the layout, so I only made the one side. It may not be prototypical, but it gets the job done and we think it looks great (Photo 11).
SPECIAL REPORT: Scace Tries DCC Again! Say It Isn’t So!

Sometimes, events conspire to teach you something even when you’ve already made your mind up on the subject. In my case, it’s DCC, and you’ll have to pardon my re-telling the tawdry tale (short version, of course). Back about eight or ten years ago, I installed DCC on my (three residences ago) railroad. I won’t expound on whose systems were involved, but I found the whole thing to be pretty non-friendly, unreliable, and a catalyst for seaworthy linguistic expression. It didn’t like me, and I didn’t like it. Many of you have read my musings on the subject, boiled down to, “Try it. It might be the very thing for you, but it isn’t my bag.”

The first event in the current conspiracy was Atlas O dropping 2-Rail TMCC, and announcing the shift to factory-installed DCC in the Gold Series locomotives. That didn’t help me much, as I had a pretty fair-sized roster of TMCC-equipped power. Along with that, I moved to our present, and hopefully permanent, residence in Pennsylvania, requiring me to build a new railroad to a new concept. Next, my boss and our esteemed Publisher made the gaffe (in print, no less!) using the term “entry-level” in the same sentence with MRC’s Prodigy Advance DCC system, thus earning a richly deserved round fired back in our direction by Frank Verrico of MRC. Frank, and MRC, then did a very smart thing by challenging us with their Prodigy “Express” system, so I could experiment with interminable stays up there all the time, which is nice. If you can handle your TV clicker, you can handle this thing. By the way, I recommend getting some of those nifty pockets that screw on the fascia of your benchwork, so folks aren’t dropping the handhelds. Micromark sells them, for one.

The Manual

My last experience involved a dreadful tome written in non-intuitive geek-speak. After months of effort, I still couldn’t get any level of comfort out of that manual, and I’ve spent a career in engineering. MRC’s is 18 pages long. That’s only eighteen pages. It’s also written in clear language. I had this puppy correctly hooked up and powered up in (I timed it) seven minutes and seventeen seconds. That includes the time I spent on the installation section of the manual. Anything else that was relevant to my level of (in)expertise was easily found and understood.

The MRC handheld was certainly different from those in previous experience. The buttons were big enough for me to gleefully jab at without hitting three others in the process, which had been a big gripe for me with my previous system. The contrast between background and labeling is much improved. Even the labels tell you what the fool button does, in plain language. There’s a big red “Oh, Nubbins” button right in the middle by the knob, and the “enter” key is also a different color from the rest of the array.

Some Initial Impressions

The MRC handheld was certainly different from those in previous experience. The buttons were big enough for me to gleefully jab at without hitting three others in the process, which had been a big gripe for me with my previous system. The contrast between background and labeling is much improved. Even the labels tell you what the fool button does, in plain language. There’s a big red “Oh, Nubbins” button right in the middle by the knob, and the “enter” key is also a different color from the rest of the array.

The display is also the “big print” version, with good contrast. It stays on, too, not going to sleep if you don’t change the speed or push a button for some period of time. The road number of the locomotive stays up there all the time, which is nice. If you can handle your TV clicker, you can handle this thing. By the way, I recommend getting some of those nifty pockets that screw on the fascia of your benchwork, so folks aren’t dropping the handhelds. Micromark sells them, for one.
big deal, though, as the manuals for both are on MRC’s website, easily found and downloaded. Best of all, the answers to my compatibility questions were all there. Amazing!

**Operation**

I was switching cars without even looking at the handheld, like a pro, in about an hour (not still fighting it after a month or two). This system is much friendlier, I really like the “Yard Mode” too. In conventional mode, the encoder comes to zero, the locomotive stops, and you poke a button to reverse direction. In Yard Mode, you ease the encoder to zero like before. If you keep easing the knob past zero, the locomotive starts in the opposite direction. Once you get used to it that’s not a bad deal, because you can switch cars one-handed and keep the other one gainfully employed working couplers, manipulating a sniffer, or whatever.

**Programming**

I have an old GE boxcab that Fred Icken built. Many of you may remember it as having been a guinea pig before, back when I had Jerry Snow re-power it and I reviewed the results in these pages. Well, it became the test rig de jour again. I hopped in the car and made a quick trip for an NCE D408, a Soundtraxx board, and a couple really basic questions (“So, what do I need, again, and what the h@!l does it do?”) cheerfully answered by the folks at Mainline Hobby. Go see them when you pass through Blue Ridge Summit, PA. We now return to our program.

After some puzzling out for location, we dropped ‘em in and programmed them to suit. Again, nice clear instructions made the task pretty easy. I programmed the sound decoder first, giving it the same address as the D408 before wiring the whole mess into the carbody. The programming mode in the MRC system takes you step-by-step through the whole process in a nice intuitive order. About the only reference you need for programming is the list of CV’s (Control Variables) that come with the decoder. The programming process is nicely pre-canned in the MRC system, especially good for me, the fella who needs to read the VCR manual just to get the clock set.

If you remember, one of my desires for a control system was the ability to go to the blister-pack display, pick my components, and put them in myself. You guys are right, DCC is the closest to that utopia and the selection of options that are O-Scale appropriate has grown quite a bit in eight-odd years. As it turns out, that utopia and the selection of options that are O-Scale appropriate has grown quite a bit in eight-odd years. As it turns out, that utopia and the selection of options that are O-Scale appropriate has grown quite a bit in eight-odd years. As it turns out, that utopia and the selection of options that are O-Scale appropriate has grown quite a bit in eight-odd years. As it turns out, that utopia and the selection of options that are O-Scale appropriate has grown quite a bit in eight-odd years.

**Booster Use**

I divided the railroad up into three power blocks, and used MRC Powerstation 8 boosters. These things are a black box with a variable voltage output and give each power district an eight-amp capacity. Although MRC recommends piggybacking two Prodigy Advance base units together for a seven-amp capacity, they were very helpful in exploring the use of the Powerstation 8 (which is an older product) for my application. Should you go this route, the one thing to watch is that, as each booster is wired in parallel with the next one, particular attention is paid to matching polarity.

Although I initially ran the Prodigy Advance, with no booster, quite successfully driving our boxcab and a couple Carworks Alco switchers that John Peterson brought over, I found the behavior enhanced by the use of the booster units. The Powerstation boosters are not only capacity enhancers but they are also signal amplifiers, and the improved clarity of signal over O Scale distances is visibly noticeable on my railroad. I found the combination of these boosters with the packaged system creates a pretty robust environment for my O Scale use, so far, and would recommend checking it out as you design your system for your application. Those motors can add up pretty quickly when you’re running three-unit Diesel power, especially with the twin motor vertical drives currently “in vogue”, so don’t skim on the amperage capacity of your system. Here again, this was nothing I couldn’t figure out with a model-railroad-layman’s knowledge of DC circuits, a bit of healthy-gauge wire, and about an hour’s time.

**Sound**

By now, many of you are wondering why I’ve chosen to include sound in my system, especially after some of my previous written rantings. If you go back to some of those pieces of learned prose, you’ll see that I found sound to be somewhat oppressive. Even more importantly, sound doesn’t enter and leave the scenes I work so hard to create. It’s everywhere.

My adding sound is really John’s fault, again. That trunk-full of Diesels came sound-equipped, so I had to play with it. I learned a couple things that mitigated a lot of my concerns over the inclusion of sound. First, John used Dallee speakers in his installations. These ain’t exactly cheap, but the fidelity is good enough such that you can turn the engine sound way down without it turning into a bunch of plain hissing. Unlike some of the proprietary systems with only a couple sound level choices (the lowest of which is still too d@%n loud for me), DCC sound is a CV choice. It ramps down to as quiet as you want. I found the result much less oppressive, and a good deal closer to shutting up after the train leaves the scene. In the DCC world, the horn and bell volumes are independent, as opposed to other sound systems. This is nice, because I can drive folks a little crazy requiring them to ring the bell when going through my covered bridge, blow the horn appropriately, and such. Meanwhile, the prime mover is quietly (quietly, mind you) drumming along. By the way, cranking the horn is great for getting folks to stop leaning on the trackwork. You know who you are so I won’t embarrass you here, but you sure jumped, didn’t you!

Another plus that I hadn’t considered was the discovery that sound slows folks way down switching cars. Batting freight cars back and forth in a typical model-railroader-frisky fashion just sounds awful. Since the switchers stay within visual scenes, I turn the volume up a little more on them without compromising the visual effect, and slow the car bashers down.

**List of Components:**

You’ll note that more folks than MRC are mentioned here, which is a bit unusual for a review. That’s a big advantage of the protocol. DCC isn’t proprietary; it’s an NMRA standard. MRC’s system is currently driving NCE decoders piggybacked with Soundtraxx sound decoders in my case, and the experiences with intermingled gear are important to the review of the system itself for compatibility. I observed no compatibility issues, as one would expect from a product in compliance with a common protocol. Anyway, here are the components I used to build my system.
North Coast Engineering, 899 Ridge Road, Webster NY 14580
585-671-0370 • www.ncedcc.com
North Coast D408 series  MSRP $80
Specifications (NCE D408 Series Decoder):
4-Amp Continuous Rating, 12-Amp Peak Rating, 8-Function (Headlights and the like). D408-E is a Back EMF Decoder (Constant Speed over Variable Grades and Loads)

Soundtraxx, 210 Rock Point Drive, Durango CO 81301
970-259-0690 • www.soundtraxx.com
Sound decoders Soundtraxx DXS series  MSRP $85

Dallee Electronics, 246 West Main Street, Leola PA 17540
717-661-7041 • www.dallee.com
Speakers MSRP $13

What About Older Power?
I bring this up because of one of the issues I encountered the first time around with DCC. This is something that also has bearing for many of you folks, so I’ll revisit it here. When I was troubleshooting the first system with an old HP oscilloscope, I discovered that my US Hobbies-vintage steam, scratchbuilt stuff, and lit passenger cars created some very high-amplitude short-duration amperage spikes that spelled eventual doom for the then-current crop of decoders. The problem was in the pickup paths. Every little arc over oiled journals, truck bolts, and iron wheels would cause one of these spikes.

I’m still not convinced (yet) that the newer crop of decoders has addressed this robustness issue, or if they ever can. There is salvation for me, however, in two approaches. Since my mainline is wired and blocked for conventional cab control, I simply wired them to be switchable between the conventional throttles and DCC. Each set of track leads is dropped to the center taps of a pretty beefy double-pole rotary switch. Then, the track leads from the Power Station 8 booster are wired into the first pair of contacts (label that position “DCC”). The track leads from the conventional throttles are wired into the second set of contacts (label that position “CAB”). Pay very close attention to matching polarity as you wire each rotary. I used rotary switches because I still have to test products equipped with some of the proprietary control systems, each wired into subsequent pairs of contacts. For your purposes, though, a healthy double-pole double-throw toggle switch will get you there if you’re sticking with the two options. After finishing this little exercise, I could run one of my myriad old'sleds (and I have a lot of ‘em!) with impunity on conventional cab-control on one mainline track, a pair of DCC-equipped P&D F2s on the other, and switch the industrial areas with our boxcab. Manipulate a few switches, and any combination is possible. If you pull this stunt, though, make sure that the gaps between sections of railroad are mechanically re-enforced with insulated joiners, epoxy fill, or styrene to avoid that expensive acrid odor resulting from crossed systems.

The second approach, of course, is to do the work on those pieces of rolling stock and motive power to minimize the number of mechanical connections (especially oily ones) in the electrical path, such as adding phosphor-bronze pickups to end-run the through-the-journals/ through-the-kingpins path of conventional practice. Anything earmarked for DCC operation will eventually cross the workbench for this treatment at the same time the decoders go in.

Some Conclusions, and the Future:
It is nice to see that MRC has done quite a bit of work in a direction that benefits folks like me. Rather than give the geeks among us new nifty features, MRC is making what is probably the current top-end norm in capabilities much more friendly for the rest of us to use and enjoy.

By the way, I’m not saying that this is the only system out there. Check them all out as you design your system for your tastes. I will say that Frank and MRC were the first to have the, uh… confidence (…yeah, “confidence” is the word I’m looking for here) to take on Scace the Ludite with their product line, and the price point is worth paying attention to. As another thing I consider, I’ll also mention that MRC has always supported my gear over the years. I’ve had to send in a couple Controlmasters that I roached (not a warranty issue, but my own stupidity), for example, and they cheerfully fixed me up with a very quick turn-around time. They’ve been around for many years, and their support of their product line, in my experiences, has always been excellent.

With the Prodigy system, I have to appreciate the effort in catching “user-friendly” up to the technology. They got me and, so did Peterson.
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### Product News & Reviews

**News: Bucyrus Steam Shovel, MSRP $300**

Toy Trucker & Contractor, 7496 106 Ave SE, LaMoure ND 58458
800-533-8293 • www.toytrucker.com

In the summer of 2007, Toy Trucker and Contractor will release a Bucyrus steam shoveling model, a 1:48 scale replica of a steam shovel used during the construction of the Panama Canal. Manufactured by TWH Collectibles, in cooperation with Bucyrus International, this die-cast model is accurate to the smallest of details, replicating the design and functions of this giant machine of the early twentieth century. This is a model of a Bucyrus 95-ton steam shovel, the largest of 12 models Bucyrus offered between 1895 and 1901. Of the 102 shovels used on the canal project, Bucyrus had the rights to 77 of them.

The TWH model is 16' long from boom tip to rear coupler, over eight inches tall at the boom tip and over five inches wide across the extended outriggers. The die-cast model weighs in at just over three pounds. The model is loaded with operational details: removable and functional rear coupler, working trucks and suspension, working outriggers, working winches that use chain and rope to operate the function of the shovel, complete detailed interior, removable exterior housing, and much more. Even the undercarriage is completely modeled to scale.

Delivery is expected in June of 2007. The production run will be limited to 5000 pieces. Pre-orders are being accepted now.

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### Model Trains

**Jim Hackworth**

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**Product News & Reviews**

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**SEND LSASE FOR LARGE LIST OF MG/USH KTM ITEMS**
reviewed by Joe and Jaini Giannovario

We decided to hold an Open House for the OST layout over the Christmas holidays. As a result we wanted to scenic a portion of the layout that is seen as you come down the basement stairs. It is a stand-alone scene, and we felt our visitors would get a better feel for the overall future look of the layout if this area was scencied.

As Scenic Express is an OST advertiser, we visited their website to see what they offered. What follows is our combined impressions of some of the materials we purchased.

**Realistic Tree Kit #WD1103, Green Deciduous, 5 - 7” tall, 7 per pkg, $15.98**

If you have never seen these tree kits, you are in for a surprise. The kit consists of plastic molded tree trunks with branches and foliage. The “tree”, out of the package, has the trunk and branches all in one plane; it’s “flat”. You bend the branches around the trunk to give the tree a three-dimensional look. The branches remain in place after being bent. Once satisfied with the branch location and general shape of the tree, you spray the branches with an adhesive and dip the tree into the foliage provided. This kit comes with three foliage colors. A note here about the foliage is in order. The foliage is in big clumps that must be broken into finer pieces for a more natural looking tree. Jaini says the process is tedious but essential for a nice looking tree.

The instructions suggest using Hobb-E-Tac adhesive, but we chose to use WEB spray (also available from Scenic Express, #BO1526, $10.99). Rather than a mist, this adhesive sprays out in a webbed pattern, which gives the foliage more surface on which to stick. The result is very nice but the adhesive has a strong odor and should only be used outdoors.

Without too much effort we were able to make passable deciduous trees. With a greater degree of attention paid to branch location and a bit more attention to the foliage, these would be perfect foreground trees.

**Realistic Tree Kit #WD1106, Pines, 6 - 8” tall, 16 per pkg, one foliage color, $15.98**

The pine tree kits are made of the same plastic as the deciduous trees. However, the results were not as nice. The manufacturer suggests twisting the trunk so that the branches form a spiral. After dipping in the foliage, the effect was more like a bottle brush than a pine tree. I have an idea how to fix that, which I will detail at another time after some experimentation.

Based on our disappointment with the pine tree kit, we purchased several ready-made trees.

**10 Piece Tall Pine Set #NH26322, 7 - 8” tall, $16.98/set**

These were very nice flocked pine and fir trees on metal armatures, which are great for filling in behind rocks and structures. Jaini feels they are too uniform, but I like them as-is.

**20 Piece Pine & Fir Set #EX0201, 6 - 8” tall, $29.98/set**

More pines, but taller. Jaini likes these best. I think they need some trimming, but, hey, I’m not the artistic one of the pair.

These are fuller trees with more varied foliage and quite nice.

**Nordic Fir, 9-3/4” tall, #NH21900, $12.99 each**

We bought three of these beautiful trees for prominent display in the scene. These trees are made in Germany by Noch, and they’re worth every penny of their price.

**Prairie Tufts #MN72733, XL Late Summer and #MN72734 XL Autumn, $24.99 each**

If you want your scenery to look real, you have to try Prairie Tufts. These are fine fibers simulating grass clumps attached to an invisible base. You peel them off and glue them down. The look is fantastic, and realistic. One set consists of a 12” x 8” sheet with over a hundred tufts. It would be difficult to make these yourself for this price.

One more comment is in order. When we called the first time, we did not identify ourselves with this magazine so we experienced Scenic Express’s service as any other customer would. We had called late in the afternoon a week before Christmas. Sandy, who answered the phone, was very helpful and said she’d try to get the order out that day. Our first box of scenic materials arrived by UPS the next morning (we’re in the same state). The next time we called we spoke to Jim Elster, the owner, and he was just as helpful.

Included with our order was a Scenic Express catalog. We had no idea there were so many products available for scenery. Scenic Express has lots of them in stock and can ship your order right away.

If you are looking to scenic your layout, give Scenic Express a try and remember to tell them you heard about them from O Scale Trains magazine.
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7020 Columbia Gateway Drive, Columbia, MD 21046
REVIEW: Searchlight Signals

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Custom Signals, LLC, 27 Gellatly Drive, Wappingers Falls, NY 12590 • www.customsignals.com

reviewed By Gene Clements

The Prototype

Train movement through blocks governed by signals has been around since 1872 with the introduction of ABS (Automatic Block System), and with CTC (Centralized Traffic Control) in 1927. Searchlight signals were introduced in 1920 as an improvement over the then common semaphore types. The design was improved upon in 1930, to give an even more focused beam of light that could be seen at a greater distance. The searchlight signal uses a single lamp with a system of moveable lenses to project multiple colors, usually red, yellow, and green. Other color variations can be found. The searchlight signal found widespread use by American and Canadian railroad companies and is still in use at many locations today. Most of the signals I operate by on every trip on the BNSF Birmingham Sub are of the searchlight type.

The Models

The signal models being reviewed are the SL-25, SL-35, and SL-45, all double headed signals, and the SL-55, a triple-head signal. Both the SL-35 and SL-55 stand approximately 24 scale feet tall above the foundation, while the SL-25 and SL-45 stand approximately 19 scale feet above the foundation. The design and detail work of each signal is exceptional and to 1/48 scale dimensions. Details include proportioned ladder, service platforms, and safety railings for each signal head. Also included are nut and bolt castings on the masts where each appliance mounts to the mast, as well as base details. Details on each signal head include the maintainer’s lock on the back of the case, and the maintainer sight on the top of each signal head, complete with the hole in the target that is used to aim the signal. Also included with each signal are a removable number plate and decals to identify the signal as a “permissive signal”. Remove the number plate to designate an “absolute signal”. The simulated round concrete base has multiple holes for ease of mounting to the layout.

Each signal head light is a computer-fabricated board with 3 LEDs (red, yellow and green), designed to be as close to the prototypical color as possible and bright enough to give a searchlight effect. Each signal includes a Signal Control Board from the Atlas-O 21st Century Signal System. Connection to the control board is made with a modular plug attached to a 21” long wiring lead from the signal base. A 7/16” to 1/2” diameter hole through the layout scenery will be required in order to insert the modular plug through and below the layout; this hole is easily covered by the width of the signal base.

Also included with each signal is an “Installation and Instruction Manual”. I was impressed that prototype terminology shown in the glossary corresponded to G.C.O.R. (General Code of Operating Rules) definitions and rules that I work under. Equally impressive were the various signal scenarios you typically find in ABS and CTC systems. Illustrations and text show and explain the components to use and how to wire each scenario for prototype operation.

Last, but not least, a power supply of 6-22V (AC or DC) can be used to power the system. All signals and control boards are compatible with the Atlas-O 21st Century Signal System products currently available. Custom Signal’s products can be used with either three- or two-rail layouts. For two-rail applications, the modeler will need a source of “block detection”. A relay, photocell, or infrared system can be used for this purpose, or use the Atlas Current Sensing Detector, #7935. All hardwire connections are made via screw-down terminals on each signal board.

In Summary

Terry Christopher and the people at Custom Signals have given the O Scale marketplace a very detailed model of various prototype signals, with an expandable plug-and-play control system. By using the signals of choice, combined with the control board system, the O Scale model railroader has the option of creating as simple, or as complex, a prototypical operating ABS or CTC signal system as desired. Check out Custom Signals for yourself; you will find their advertisement, website address, and mailing address in this issue of O Scale Trains. To Terry Christopher and the people at Custom Signals, as we say in the South, “Way to go, folks”.
Review: Scenic Details, Awnings MSRP $9.50, Sidewalks MSRP $8.75
Frenchman River Model Works, HC1 Box 185A, Stratton, NE 69043 • www.frenchmanriver.com

reviewed by Brian Scace

Frenchman River Model Works has been making a line of HO scenic items for a while, now, and is now entering the O Scale market with several interesting items.

First off is a kit for window awnings, consisting of four sheets of striped-pattern awning material and the wire supports needed for mounting these awnings to your structure of choice. These are helpful for folks modeling the steam era, especially, as window awnings were more than decoration back in the pre-air conditioning era.

While perusing their website, I also saw some sidewalk castings that have some promise, too. Although marketed as an HO item, the #004 “Big City Sidewalk” scales out nicely (about four feet wide) for our use. The curb height is about four scale inches, and the castings are nice and crisp. Included are a couple corners with storm drains, a section with a vehicle ramp over the curbing, and a section with an HO-sized manhole cover cast in. Quick work with a drill and an O Scale manhole cover will take care of the lil’ HO one, making all the pieces useful. I’d love to see them offer a bag lot with a whole bunch of just the corner/storm drain pieces, which are certainly the hardest of the bunch to scratchbuild convincingly. They’re certainly worth a good look.

Frenchman is coming to market with a kit for a wooden rowboat (with an outboard motor), in keeping with the shoreside themes evident in their HO line. If you are looking for some nifty scenic detail castings and detailing kits, visit them on their website to see what they’re up to.

Review: Chicago Burlington & Quincy 28’ Caboose
O Scale Kit # 403009  MSRP: $120.00
Mullet River Model Works, 118 Huson Ct., Plymouth, WI 53073 920-892-8159 • www.mulletrivermodelworks.com

reviewed by Martin Brechbiel

Mullet River Model Works has been advertising their cabooses for quite a while in these pages. As it turns out, they actually offer 11 caboose kits, a flat car, and a gondola, as well as some structures (see OST, Jan/Feb ‘07 page 54 for a review of their Wisconsin Central/SoO Line Depot). These are all laser-cut kits of plywood construction with working side windows and cupola windows, an etched brass underframe, and brass ladders. Having been more than mildly intrigued, I was unable to resist an opportunity to check one over first hand. These were older cars on the CB&Q that had been remodeled with a steel underframe and using the same cupola as the 30’ cars. Window spacing varied on the 28’ cars, since there were many classes of them. This model represents the NE1 and NE4 cars.

I’ll confess that I had not handled a modern-era craftsman kit (or any kit for that matter) for many years, so a small amount of trepidation began to counterbalance my excitement pending actually opening the box and seeing what bargain I had entered into with our Mephistophelian Editor. There were several very tidy plastic bags very neatly organized with laser-cut components cut from thin plywood. Included in the one bag was also laser-cut window glazing and decals. In yet another separate bag was a sheet of etched brass underbody framing parts, steps to be assembled, ladders, and even tissue paper for the roofing. There were five pages of instructions and another five pages of exploded component construction views, interior component views, and views of the etched brass components and their ultimate respective locations.

Assembly began with the lamination of the sides and ends. There are three layers of laser-cut plywood, and carpenters’ or white glue is recommended along with weighting these assemblies to keep them both flat and aligned. Everything separated nicely using a scalpel blade (whatever you prefer, invest in a new blade for this!) and, despite not liking using water based glues due to warping issues, I acquired a bottle of stainable carpenters’ glue. Everything went together smoothly and, between a bag of clothespins and lead weights, nice and flat as well. One critical issue to laser-cut kits with slot-and-tab construction – you really, really have to keep all of the slots clear of glue. After I got the sides and ends together, I made my first mistake. The next heading on Page 1 was “Assemble cupola components”, followed by a lot of instructions on assembling the interior. Page 3 is where the cupola instruction really are (I knew that, did it anyway... really!). No real harm done but something to correct, and I was able to “adjust” the cupola sashes to be acceptable to me. Assembling the interior could be improved a bit with an exploded-view drawing of identified parts. Otherwise, it’s a puzzle that’s solvable on the basis of a limited number of parts that simply have to go together a certain way. Gluing together the obvious and dry fitting the rest until you have a completed sub-assembly, then gluing that into place, works. There was one slot in the right interior wall that is incorrectly positioned that required removing one tab to install the interior for that side. Fortunately, it’s not noticeable. The bracing parts under the bunks all have tabs, but there are no slots for
them in the walls. I never did find the interior ladder rungs to the cupola. I don’t think that they are needed anyway, and I’m going to put some lead weighting under the bunks as well.

I’ll confess that there is something very satisfying about taking an entire interior sub-assembly and having multiple tabs audibly snap into place. I may grow to like laser cut kits!

Assembling the sides and ends together went smoothly after I went back and removed every scrap of excess glue at the overlapping edges. The tolerances on the corner lap joints fitting the sides and ends together was really nice and tight, and contributes to strong construction. The only real issue I had here was the section that goes under the door sill. This is a very, very delicate part of the ends that is attached by two very small slivers of wood. After I broke one off three times, I just took both off and glued them into place later after the floor was installed.

Now I was supposed to assemble the cupola, another three-layer lamination exercise that went very smoothly. The lap fitting assembly really makes it next to foolproof to get this square, and the assembled cupola dropped right into its resting place between the two sides of the assembled body; another precision fit!

Painting the sashes and door pieces was next. The glazing for the door is the full size of the door, and gets sandwiched between two layers to make the panels in the lower sections and “glass” for the upper part. I could not locate any information in the kit pertaining to color schemes and not being a CB&Q expert, I won’t even take a guess.

The roof is designed to be removable, and there are 14 roof ribs on one end and three on the other side of the cupola. They all have to fit into their respective slots on the wall sides for this to work, along with the cupola. I pre-curlcd both roof sections, sanded them slightly to align the slots in the roof with those in the walls, and installed the ribs (two at time as recommended), finding it increasingly difficult to snap the roof into place. By the time I got all of the ribs installed the roof snapped nicely into place. Ultimately, both roof sections joined up nicely with the cupola as a single removable unit.

Assembling the etched brass underbody was more trouble-some. A few alignment or soldering tabs for the center sill box would have been useful. The bolster crossmembers also do not seem to be wide enough to either form the bolster and to also set down onto the underbody floor. After some consideration, were these parts not folded on the fold lines as instructed, they may actually be correctly dimensioned. Everything else seemed to fit as designed correctly into the wood bracing.

The final finishing touches are really left to the modeler, grab irons, creating the end railings (supplying a template for that would be nice!), location for a smoke jack, brake component(s) and their locations, etc. Overall, a fun kit to build with a bit of a challenge to it. Though perhaps not a kit for a beginning kit builder, it’s definitely one for a more experience builder, particularly so if you have any interest in the road names that are offered or if you’d just like a really neat wooden caboose for your own private line. The neatness and precision cutting of the components was quite a novelty, as compared to having to cut every stick, and the neatness of fit was quite gratifying. So there were a few glitches, and a couple of errors by both kit and builder; nothing that would be considered compromising.
Howard Zane, 5236 Thunder Hill Rd, Columbia MD 21045
410-730-1036 • [www.zanestrains.com]

reviewed by Joe Giannovario

I've never met Howard Zane, but after reading his book I wish I had. He's that personable, even in print. Not everyone you'll meet in model railroading has a personality big enough to warrant their own book. Howard is one of the few. Yes, it's an autobiography of sorts.

Over the course of 32 (short) chapters, Howard details his journey through the world of model railroading, from riding in an Erie K-1 4-6-2 with “Uncle” Ike, to his father's early layouts with a Lionel 700E and a Lobaugh Challenger, to his discovery and adulation of John Allen's Gorre & Daphetid. Howard has done it all; built a 2850 sq. ft. HO Scale empire, owned and operated a hobby shop, and established one of the most successful scale model trains shows in the country. Actually, he's done quite a lot more, but you should read the book to find out what those are for yourself.

Were this just an autobiographical trip through Howard's railroad activities, I would be hard pressed to make the case for spending over $80 for this book. What makes this worth the money is the stunningly beautiful photography of Howard's layout by Geren Mortensen, Jr. Mortensen’s photos could have been a book project by themselves. He shows Howard's work to its best advantage and the photos will inspire any model railroader, regardless of scale. You'll spend hours just looking at the pictures.

Now, add to all of this tips and tricks from Howard's experience building his model railroad and you have something of value, a book that will become a reference in your library rather than collect dust on your coffee table.

Okay, so if Howard hadn't sent me a copy to review I doubt I would have purchased it myself. After all, it's largely about an HO Scale modeler and I'm an O Scale modeler. But, I would have done myself a disservice in passing up this book. I learned a lot about Howard Zane, the man and model railroad entrepreneur. I also learned a lot about what goes into building and operating a successful model railroad. No matter what scale you model in, you'll get your money's worth from Howard's book.

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Errata: We failed to identify Art Selby as the photographer for the article on George Eschbach’s layout in OST #30.
Coupler Height Gage.

With so many cars available to the O Scaler these days and 3-Rail conversions being a part of life, I thought you might be interested in a neat little tool that I use for checking Kadee coupler heights and the gap that is needed to fit them.

In Photo 1 you will see there is the standard piece of O Scale track with the gage sitting on it. In Photo 2, you see the gage in use.

My good friend Bruce made the height gauge from aluminum. One end has the coupler and the other end is machined as a guide for cutting out the space needed for a Kadee.

I have included a drawing if you want to make one yourself.

A piece of clear pine 21” x 8” was cut, the track screwed down, and that’s it. If you don’t want to make your own gage, Kadee sells one that is die-cast. We made ours because O Scale Kadees and gages are not available in West Australia.

Till next time, Neville.
Deichman’s Depot

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Realistic Passenger Car Lighting

Every holiday season we find, yet again, the model railroad setup in the shopping mall. There is the inevitable passenger train chasing its tail around a loop of track at a scale 200 miles per hour. The car lights of its three passenger cars are blazing as if there were bonfires burning inside, flickering off and on as the wheels pass over each speck or gap in the track. The train is only three cars long because the interior lights take so much electricity that the train power unit will not support more than that.

I would like to talk about more realistic car lighting. Of course, it involves my favorite subject, light emitting diodes (LED’s). LEDs are turning up everywhere, from flashlights to streetlights. So what can they do in a model train layout? The beauty of LEDs is that they use very little electrical power. They also last forever, can be very small, and are available in many different colors. The thing to consider is that they require a direct current (DC) source. I would like to show how easy and inexpensive it is to add LED lighting to passenger cars. It works with DC cab control and all command control systems. This topic will take more than one article, so I will start at the beginning.

We need two items to power our LEDs. You’ll need a rectifier to convert the track voltage, whether you are using alternating current (AC) or switchable polarity DC, to consistent polarity DC. Also needed is a current limiter to avoid overloading the LEDs. Both of these are simple, small, and cheap. Shown in Figure 1 is a unit that is about 0.75” by 1.5” in size and 1/4” thick, costs less than $5, and can cost considerably less in quantity. Then you need the LEDs. White (actually bluish white) LEDs are the most expensive color, about $1 each. Yellowish LEDs, that match the lighting in older passenger cars, are actually less expensive at about $3 for ten.

While this procedure does not require an electrical background, you might want to consult the electrical chapter in the book “A Guide to Modern O Scale” by O Scale Trains Magazine.

As shown in Figure 2, the four diodes are wired in what is called a bridge rectifier circuit. The input is connected to the track rails through the car’s wheels and, whether it is AC (3-rail style or command style), or DC (switched based on direction of movement), the electricity comes out of the bridge rectifier as DC, polarized as shown by the plus sign. It is somewhat ragged, so the capacitor smooths it a bit to insure it doesn’t interfere with any radio control circuits. The current then gets to the LEDs through the integrated circuit and the resistor. This particular integrated circuit (called an LM317) has the characteristic that it will not let the voltage across the resistor exceed 1.2 volts. Thus, if the resistor has a value of about 60 ohms, then by Ohm’s law (current equals voltage divided by resistance), the current cannot exceed 0.02 Amperes, usually called 20 mA, the amount needed by the LEDs.

This will send 20 mA into anything from a short circuit to as many LEDs wired in series as the input voltage will support. The voltage used up by an LED depends on the color, going across the spectrum from red at about 1.2 volts to blue at about 3.5 volts. White, being a combination, also requires about 3.5 volts. So, if we have command control for our train layout with about 18 volts, we would lose about 1.5 volts in the diodes, 2.5 volts in the regulator-resistor combination, and have enough left for up to four LEDs. If you want to play safe, or if you use DC cab control which uses a lower voltage for lower speeds, then use a separate controller for each one or two LEDs, as actually shown in Figure 2.

The parts can be mounted by drilling holes for leads in a piece of plastic, wood, or even cardboard, inserting the parts, and soldering the leads on the back. For that reason, Figure 3 shows the wiring as seen from the back or bottom (Yes, we could have a printed circuit board made to make the wiring easier!)
Some passenger cars that I converted had four incandescent light bulbs per car that each used about 1/4 Ampere. In this case, one car’s lights consumed about 1 Ampere, and a train can easily use more electricity for lighting than for the locomotive motor. This compares with 0.02 or 0.04 Ampere per car for LEDs. It would take 25 cars to use one amp of power.

LED light projects more like a searchlight, so I aligned four of them to point along the length of the car. Thus they light up the O Scale people in the car and don’t directly shine out the windows. They are very realistic (but are not as appropriate for passenger cars that have silhouettes of occupants pasted on the inside of the car windows). Four LEDs per car tended to give more even lighting, but one or two would be perfect for a combine or a caboose.

**Parts List:**

All parts can be obtained from Digi-Key, Radio Shack (possibly by order) or All Electronics. The only problem is that vendors prefer to sell them by the bunch due to their low cost. Remember to connect the diodes (white stripe) and the regulator (flat side) in the correct direction. Also the longer LED lead is the plus lead. Backwards is bad news.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1N4001 Diodes</td>
</tr>
<tr>
<td>1 or 2</td>
<td>LM317LZ Regulators</td>
</tr>
<tr>
<td>1 or 2</td>
<td>62 ohm 1/2 watt Resistors (or 56 or 68)</td>
</tr>
<tr>
<td>1</td>
<td>(Optional) Disk Capacitor (0.01 microfarad or anything in that range)</td>
</tr>
</tbody>
</table>

Now you have more current-efficient and more realistic looking lighting in your passenger cars that is compatible with DC, 3-rail, or command control. You can run a more realistic train with a diner, Pullmans, and a mail car in addition to those coaches, while consuming less of that precious power your locomotives would really like to have. You could even string two red LED’s and one white LED in series in a caboose for markers and internal lighting.

But the lights will still flicker, just as the incandescent lights did. Next time we will describe how to get rid of the flicker. Here’s a hint. We will use an electrical flywheel.

---

**Really Obvious Tips**

Brian Scace

A fellow was posting his tale of woe on one of the forums the other day. He was converting three-rail trucks to two-rail, and kept losing truck springs. This brought to mind an old tip for manipulating small springs that seem more interested in escape than in employment.

Take a needle and thread, and loop the thread through the spring. Knot it off in a loop, of a size easily hung on to. Put the spring in (I use a small flat-blade screwdriver to handle the lil’ guy.) When it flies off in a desperate attempt at escape, you still have it by the loop of thread. Once you (finally) succeed, clip the loop and gently slide the thread out, leaving the spring in place.

You’ll find that putting springs in trucks or Kadee knuckles will become much easier, just because the nervousness level will go way down.

“You cannot escape me!”

---

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The OL&N yardmaster, with his faithful mutt, stands by the Kaloma yard signal shed waiting for the mornings’ activities to begin.
One of the most creative features of John Armstrong’s Canandaigua Southern was his rendition of “Night Hawks”, arguably Edward Hopper’s most famous painting. The scene has been preserved, thanks to John’s family, and is now part of Brian Scace’s new O Scale railroad. A new customer (at the far right) is seated at Chez Pierre; could this be the only O Scale model of an O Scaler?

No big hoopla here. The “golden spike” is driven on OST’s Coal Creek Railway during its open house showing last December. N&W K3 #201 sits in the background waiting to take the crew home when they’re done. The loco is by Sunset and the figures are from Woodland Scenics.
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20-3132 American Freedom T-1 PS 2.0 2-R $999

20-3130 Reading T-1 PS 2.0 2-R $999 3-R $925

20-3132-2 N&W J-Class PS 2.0 2-R $999

2-8-0 H-3 Consolidation PRR x 2, L1 2-R $635

20-3160-2 PRR 2-10-4 J1a PS 2.0 2-R $999

20-3167-2 Union Pacific 4-6-6-4 Challenger $1250

2-8-0 19th Century Steam WM, RG, GN 2-R $635

3-Truck Shay Cass, WM, Weyerhaeuser 2-R $999

NYC Dreyfuss 2 versions 2 or 3-Rail $919

Alco RS-1 2-R 369 2-R Gold 389 3-R TMCC 389 NYC, Amtrak, LI, Vermont RR, Spokane International

RSD-7/15 Conventional 189 TMCC 299 C&O, PRR, SF, SP

Atlas - Instock

B&O Fishbelly 4# 3R 49ea 4/190 2-R 52 ea 4/205 PRR War Hopper 8# 49 4/190 PRR War Bonds 2 #

Atlas 2-Rail Locomotives


SD-35 2R DC PRR, SP, B&O, CSX, PC 325 2R TMCC JC, WM, PC 325 Dmy 185

RS-1 2R DC NH, SF, Ann Arbor, M&E, WT 325 2R TMCC C&O, NH, AA, M&E, WT 349

Atlas 3-R Locomotives – In-Stock

C424/425 Power TMCC 415 Dummy 209 MEC, CBR, PRR, E-L, D&H, CP, N&W

Weaver Blow-out... In-Stock

NKP 1.1a 1.1b Hudson 1.1a Brooks or 1.1b Lima Built O-54, 2# each, Deflectors Optional TMCC $825

3-Rail VO-1000 TMCC, RailSounds, EOB $249 MR, WP, Erie, NP, RI, NPR, C of GA

Weaver Wartime Gondola w/Die-Cast Trucks 2 or 3-Rail $25 each or 4/$99 delivered N&W, NYC, ATSF, MEC, CNJ, LV, NPR, UP, Sou, L&N, C&O, B&M

K-Line

K-Line 2-R Shay PLC, Lack, Undec $499


Korber 30” Roundhouse 3-Stall 189 Xtra Stall 45
FRE O SCALE LIST: List of O Scale shows for 2007. Send LSSAE to Bob Retallack, Dept OST07, 2224 Adner Ct, Columbus, OH 43220.

WISCONSIN DELLS MINIRAMA items wanted! Pictures, slides, home movies, etc., of this tourist attraction. Looking for the person who has eight circus train cars from the circus trains that ran on this diorama. Also want to know the whereabouts of John Carruthers, Ted Saunders, Bud Edwards, and Frank Dietrich. Your help would be greatly appreciated in my research. Jeff Haertlein, Box 328, North Freedom WI 53591, GNS582@webtv.net or 608-522-3326.

EVENTS

March 2007

3: Wind Gap, Pennsylvania
Eastern O Scalres 2-Rail Swap Meet: At the Plainfield Fire Hall, 6480 Sullivan Trail, 9:00 am – 1:00 pm. Admission $5; (spouses & children under 14 are free), $16.00 for the first table (includes one admission) and $12.00 for each additional table. Dealer’s set-up Friday evening 6:00 p.m. to 9:00 p.m. and Saturday morning 7:00 a.m. to 9:00 a.m. Info/reservations, SASE – EOS, PO Box 1781, Bensalem PA 19020; (215) 264-9623. Bring an index card with your name, address, etc., for a dollar off your admission. Contact eostrains@comcast.net

17-18: Park Ridge, Illinois
Chicago Midwest O Scale March Meet: Largest O Scale meet in the country. Hundreds of vendors. Held at the Sheraton Chicago Northwest Hotel (847-394-2000). For more info write March Meet, PO Box 333, Park Ridge IL 60068 or call 847-823-1719. Contact marchmeet@sbcglobal.net

25: Hudson, MA
New England 2-Rail & Hi-Rail O Scale Train Show: Sunday at the Hudson Elks Hall, 99 Park St., Hudson, MA from 10 AM to 4 PM. White Elephant table, sales & exhibits, operating layouts, model display area, door prizes, food on site. 6 ft. vendor tables $15 before 3/1 and $20 after. Setup 6:30 AM to 10 AM. Admission: $4.00, 5-12 $1.00. Contact: Larry Grant (508) 337-6661. Contact BigBrotherLar@netzero.net

May 2007

4-6: Villanova, Pennsylvania
East Penn Traction Club 18th National Model Trolley Meet: Over 23,000 Sq. Ft. of Trolley Fun! Manufacturer and Dealer Tables. Awards for Modules and Displays. Operating Trolley Layouts (All scales, 3/4", 1/2", G, O, HO), Slides, Movies & Videos. Model Contests. Door Prizes. Clinics including Building an East Penn Trolley Module from Start to Finish. Sunday Fantrip. This year’s meet contest theme is “Trolley Freight Locomotives”. The Pavilion at Villanova University, Lancaster Ave. (US Rt. 30), Villanova PA 19085, near I-476 and SEPTA Regional Rail and Norristown High Speed Lines. Fri 6:00 PM-10:00 PM, Sat 9:00 PM-10:00 PM, Sun Fantrip. $18.00 per person, $20 after April 21st. Spouses and children are admitted free with a registered adult. Dealer tables are $20 each. Sunday fantrip is extra fare. Contact: Charles Long-Registrar, 17 Lanfair Rd., Cheltenham, PA 19012-1810, (215) 635-5288. www.eastpenn.org Contact prtptc17@navpoint.com

August 2007

4: Denver, Pennsylvania
Eastern O Scalres 2-Rail Swap Meet at the Denver Fire Hall, 4th and Locust, 9:00 am – 1:00 pm. Admission $5; (spouses & children under 14 are free), $16.00 for the first table (includes one admission) and $12.00 for each additional table. Dealer’s set-up Friday evening 6:00 p.m. to 9:00 p.m. and Saturday morning 7:00 a.m. to 9:00 a.m. Info/reservations, SASE – EOS, PO Box 1781, Bensalem PA 19020; (215) 264-9623. Bring an index card with your name, address etc., for a dollar off your admission. Contact eostrains@comcast.net

September 2007

20-22: Indianapolis, Indiana
2007 O Scale National Convention: Sponsored by the Indy “O” Scale Meet and O Scale Trains Magazine. Held at the Indianapolis Marriott East, 7202 East 21st St, Indianapolis. Rooms are $59 to $79 per night with FREE parking. Three-day admission is $30. Tables are $40. We will have 20,000 sq. ft of selling and display space for nothing but O Scale trains! For more details contact Jim Canter, 317-782-3322. Held at the Indianapolis Marriott East, 7202 East 21st St, Indianapolis, IN 46219, Ph: 317-322-3716. Contact jcanternkp@sbcglobal.com

October 2007

27: Wind Gap, Pennsylvania
Eastern O Scalres 2-Rail Swap Meet: At the Plainfield Fire Hall, 6480 Sullivan Trail, 9:00 am – 1:00 pm. Admission $5; (spouses & children under 14 are free), $16.00 for the first table (includes one admission) and $12.00 for each additional table. Dealer’s set-up Friday evening 6:00 p.m. to 9:00 p.m. and Saturday morning 7:00 a.m. to 9:00 a.m. Info/reservations, SASE – EOS, PO Box 1781, Bensalem PA 19020; (215) 264-9623. Bring an index card with your name, address etc., for a dollar off your admission. eostrains@comcast.net

Buy-Sell-Trade ads are $5 for 30 words plus your address information. Additional words are $0.25 each. Subscribers are permitted one free ad per subscription cycle. All B-S-T ads are prepaid. You may send ads by postal service with a check or money order. Ads sent by email or called in must use a credit card. See our contact info on page 2.
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kjkrigel@aol.com
Happy Birthday to Us

Yes, it's our Fifth Anniversary issue and, let me tell you, we're happy to be here! It's been a rough year for model railroad magazines. In case you have not yet heard, Mainline Modeler ceased publication last year, as did Model Railroading (the one from Colorado, not the one from Wisconsin). Both had been in circulation for 20-plus years. Other publications have had trouble staying on schedule as well.

I think OST has made it's mark on O Scale. Our opinions are valued by readers and vendors alike. It's pretty cool when a manufacturer calls you up and asks for your opinion about a model they're considering.

We continue to grow steadily with new subscribers and we increase our print runs as needed to cover the new folks. About 40% of you are Hi-Railers and that number is rising steadily. And, as you can see from the letters column this issue, Hi-Rail is an important part of O Scale, much to the chagrin of some folks. To those folks I'll say this. You want a “zero tolerance of 3-Rail” magazine, you're going to have to publish it yourself. We're here to provide O Scale information and inspiration. To be honest, we also are here to make a profit, or there's no magazine at all. In that pursuit, we cannot neglect 40% of our readership. So, here's to the first five years and five times five more!

On a Sad Note

Gordon Whitlock, a good acquaintance and great O Scaler has died. Gordon's C&O Boyertown Division layout was featured in OST#6. Gordon didn't live that far way and we became very friendly. He let me use his layout to test run locomotives before I had any track on the OST layout. He also helped me build a curved switch on the layout and we were planning to do more. Gordon was also very active in the Cherry Valley O Scale Club in New Jersey. I don't have all the details of his passing. I do know he had been hospitalized for some time and that he had been diagnosed with a brain tumor. Gordon was a great guy, willing to lend a hand to help almost anyone in O Scale. I'm going to miss seeing him at the local meets. I'm sure he will be missed by many others, as well.

The Blog

I've made some changes to the OST Interactive Forum [www.oscalemag.com/wordpress/]. First of all I've changed the name to reflect what it really is, a blog. For those of you not hip to Net-speak, “blog” is short for web-log, usually a written online journal. In addition to posting our regular columnists, both Brian and I have special “Projects” pages. Look for Gene Clements to join us there soon. The “Projects” pages are set aside for personal projects you won’t see in the pages of OST. Register at the OST Blog and you can post comments on anything you see there. One of the things I've posted recently is the official OST “Policy on Product Reviews”. Product reviews are a mainstay of most model railroad magazines and OST is no different. However, some magazines have been criticized for never having anything “not good” to say about almost any product. At OST, we call it like we see it. If there's a shortcoming, we’ll point it out and let you, the reader, decide if you can live with it. To read the policy, go to the OST Blog and click on the “Pages” bar on the right side. It will slide open and show you the link to the policy.

The other thing I've changed about the blog is the look of the pages. I hope you will find it easier to navigate and I encourage you to post your comments.

Miscellaneous Stuff

Several people responded to my request for articles but we can always use more. I'm especially interested in articles about DCC installations, especially if you have converted a DCS or TMCC locomotive to DCC. Anyone?

I am also looking for scenery articles. You'll see the "Stone Walls" article Jaini and I did in this issue. I'd like to hear about your scenery ideas and projects.

MTH has announced a new “wireless” tether for their Premier Line steam locomotives (see the photo left). Why should we care? Any new Proto 3-2 steam locos will get this new tether system and that will make the locos look better and couple closer.

However, I'm a bit disappointed in the way MTH has been marketing the Proto 3-2 stuff to 2-Railers. One the one hand they say the reservation numbers aren't large enough to warrant doing some 2-Rail models. On the other hand, there's little offered in the Winter 2007 catalog to order in the first place. It's Catch-22.

I hope the marketing people at MTH will figure out how to get the news out to 2-Railers. They have some seriously nice stuff to offer. The WM H-9 they did last year was awesome, but by the time we learned about it, it was sold out.

Keep Highballin’

Joe Giannovario, Publisher
**ATLAS O SCALE** - Locomotives! Tankers! Gondolas! Hoppers!

**ATLAS O GP9 LOCOMOTIVES**
*New Paint Schemes & Road Numbers!*
- Operating Diesel exhaust unit
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*New Model!*
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*Check out these NEW Paint Schemes!*
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For more information, visit:
www.atlaso.com/o70tonhoppers3.htm

To find an Atlas O dealer, go to http://www.atlaso.com/locator/locator.asp

For the NEW Atlas O Scale 2006-07 Fall/Winter Catalog, please send $5 ($7 outside the US) to the address below:

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Sunset Models announces the very best model ever built of the UP 4-8-4 FEF-3. One version is exactly as the UP tour engine looks today (Black Boiler). Any changes made over the years will be included on this model. The second version is the gray painted FEF-3 that will light up your railroad or display case. These are all brass, hand built models made by the finest craftsmen in the world in Korea. Production is limited to 50 models of each engine number in 2 or 3 rail. Priced under $1300 each they are a bargain compared to models costing 3 times as much in brass. Reservations are limited, so don't hesitate, contact your dealer or call 1-800-3RD-RAIL today.

You deserve the best, so why not own the best... 3rd Rail.

All 2 Rail models come with a Huge 9000 Series Pittman Motor, Kadee Coupler and Sunset's Exclusive, “Quiet Drive” Mechanism. With a fully detailed cab interior and figures, a myriad of opening hatches and vents, this is one of the most accurate and detailed models ever made of the FEF-3.