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Issue #34
Sept/Oct 2007
Vol. 6 - No. 5
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Subscription Rates: 6 issues
US - Standard Mail Delivery US$35
US - First Class Delivery (1 year only) US$45
Canada/Mexico US$55
Overseas US$80

Visa, MC, AMEX & Discover accepted. Call 800-863-7177 during
9 am - 5 pm EST for credit card orders. Please allow 4-8 weeks for delivery.

0 Scale Trains Magazine, ISSN 1516-9528, published bimonthly by
O Scale Trains, PO Box 410, Westport, CT 06881. Subscription rates: US $35 per year, $69 for 2 years, $99 for 3 years, $119 for 4 years.

0 Scale Trains, PO Box 410, Westport, CT 06881. Address changes must be in writing. Postmaster: Send address changes to O Scale Trains Magazine, PO Box 410, Westport, CT 06881.

Features

6 The CTRRA or Editor's Choice
Brian Scace discusses what went into the design and operation of his latest layout, incorporating many elements from the late John Armstrong.

15 Detailing the Weaver Troop Sleeper & REA Express Car
Add those extra little details that make a difference. John Huber shows how he did it.

17 B&M Express Car
Tom Kabele redetails the Weaver express car to B&M practice.

26 Building a Small O Scale Layout - Part 17
Mike Culham finishes detailing his roadways. Almost done!

39 Workbench Down Under
It's not what you think. Mike Cougl describes how he fits a custom-built workbench into his layout space.

43 A Working Crane Car
Need a nifty MoW car? Gerald Brothers has the answer.

48 TMCC to DCC Diesel Conversion
Faced with selling off a fleet of 2-Rail TMCC Diesels, Gene Clements decided to convert them to DCC.

Departments

12 The Art of Finescale - Mike Cougl
19 Confessions of a Hirailer - Hobo D. Hirailer
23 Modern Image - Gene Clements
31 The Workshop - Neville Rossiter
32 Traction Action - Roger Parker
34 Narrow Minded - Bobber Gibbs
52 Product News & Reviews
59 Easements for the Learning Curve - Brian Scace
60 Modeler's Shelf
64 Letters to the Editor
68 Buy-Sell-Trade Ads
68 Events Listing
69 Advertiser Index
70 Observations - Joe Giannovario
Before we get too far into this, let's talk about the purpose of this article. Although most "layout" feature articles you may be used to tend to show gorgeously completed (or near completed) railroads, there aren't too many showing how the whole thing looked with the bones still showing and the thinking still in process. I'm hoping a look at the earlier and more embarrassing stages will be an interesting benchmark and a little more informative regarding concepts, useful ideas, and thought processes to get your "I can do this" juices flowing.

A Concept as a Moving Target

I'm partial to both model building (especially locomotives) and realistic operation, so I chose a concept that allows me to either be a trackside observer or a harried employee, as mood dictates. The original plan was to build a double-track main paralleling, and interchanging with, a single-track branch. I also wanted a generic Northeastern industrial flavor, so I could change rosters as the mood struck without getting caught. Then, along came a U-Haul bearing two rather significant and identifiable sections of John Armstrong's Canandaigua Southern. We carefully unloaded the section that was "Summit" on the Mountain Division and the "Dunellen Cut", the section of single-track main that ran east from Cattaraugus and John's famous "Nighthawks" diner. Since it had fallen to me to be the caretaker of a couple major chunks of John's Canandaigua Southern, one of the most famous of model railroads, an additional primary goal has been to incorporate these scenes, initially raising several interesting conceptual issues.

I was back to recognizable scenes again (a concept I originally wanted to get away from); this time they weren't prototype ones, but from the mind of the "Dean of Trackplanners" in the model railroading community, John will always be the creator of them, but it would be arrogant presumption on my part (just because I was utilizing them) to now call my railroad the Canandaigua Southern. The solution to this minor conundrum was gleaned from a plain black box cab, built by Fred Ickner for one of his friends at the New York Society of Model Engineers years ago. When I bought it at a train show, it was rather hopelessly configured for outside third-rail. Back then, it made more sense to letter it CTRRA, in the style of the NYC I 10 powers that once prowled Manhattan, and put it to work at John's house. The CTRRA was a bit of an inside joke with us, my boxcab constituting the entire corporate entity known to us as the Cattaraugus Terminal Railroad Association, the "Cat".

Next on the list was the fact that the geometry of the two Canandaigua Southern sections bare less than no resemblance at all to anything I had already committed to concept, paper, or wood. Yet, I still very much wanted to rise to this...
Here's an example of the benchwork style. Initially the benchwork itself is pretty limber until the uprights and sub-roadbed are added. The results are light and extremely stiff and stable.

rare opportunity though I was starting, as John used to say, "behind scratch". The concept of operation was adjusted by a rather tough re-swing through the "Givens-and-Druthers" process, further complicating by the necessity of siting and picking up the track geometries (grades, curvatures, elevations, and super-elevations) of the two CS scenes. The rather bizarre solution popped in the brain in the middle of a restless night's sleep, and has actually worked out pretty well.

There are actually two railroads under construction, here. One is a simple round-the-room double-track parade route, home to the variety of locomotives and rolling stock I want to run at the moment. The mains utilize and are woven through the two pieces of John's railroad you'll be seeing in some of the photos. Here, the desire to watch good models run in a historically appropriate setting is satisfied. Sharing the scenes with the mains is the CTRRA itself, a point-to-point switching operation to satisfy the car-shifter/operator gene. Because I've stuck with early Alco switches and steam-era rolling stock here, I can ignore most of the minimum radii constraints of a 13' width, pick up the "High Line" trackage on John's "Summit" section, and provide three like-minded masochists a pretty satisfactory couple of hours.

The whole thing then turned out to be quite buildable, because the two lines never physically interchange. The railroad(s) can be double-decked without looking like a double-deck affair, and without becoming claustrophobic. Since the space is only 13' wide, I don't have room for helixes or hidden ramping while keeping decent aisle-widths and some lounging space to accommodate the supervisory types. What ties this whole concept into a nice neat bow is that the mainline still can be pretty historically neat, as an observer's paradise, while the terminal road can just as easily be fictitious, being an operator's nightmare. The integrity of each isn't compromised by the existence of the other.

The lesson, in all this mind-numbing narrative, is this. Don't put off building until "later", because of some nagging fear that, once you get a good start, your priorities or interests might change. There's no better way to zero in on what really appeals than to start building a railroad. Besides, there's nothing you can't modify (or lie about) when your tastes or desires change or come into better focus. I doubt if your concept will go through the radical changes mine did, and I made out quite nicely.

**Space Preparation**

As I alluded to in a couple "Easements" columns, the space preparation was pretty straightforward, and I'd invite you to go back and look at them again. One thing I did want was plenty of lighting. Since the ceiling height here is only seven feet, the skull-broiling effect of spot-lights was considered to be prohibitively obnoxious so I went with lots of cheap four-foot fluorescent fixtures and really lit the place up. Each fixture has a cool-white and a daylight spectrum bulb installed; while the light level is bright, it isn't oppressive. When they're on, though, the window wells are really lit up, and the daylight/cool-white mixture sure makes it look like I'm engaged in horticultural pursuits in the basement that would be frowned upon by the local constabulary. I'm still waiting for the visit.

There still was something missing, however, and the solution presented itself with the new popularity of those nifty pig-tail fluorescent bulbs meant to replace the old 40-watt in your table lamp. Some track-lighting components and a fistful of pig-tail fluorescents in place of the scalpel-burners give just the right punch where needed, yet are nice and cool to the touch (hard, bald-spot, whatever).

**Benchwork, Sticks, Screws, and Blood**

My basic benchwork was originally built for a 2' x 3' B&A-in-the-Berkshires model that lived in one of the many previous abodes. That railroad was purposely built in such a way that, when the inevitable move happened, it could be stripped and the basic benchwork dis-assembled for storage and eventual resurrection. The structure is built in 48" sections, each 32" deep, with crossmembers on 12" centers upon which attach the uprights for the 1/2" plywood the five-ply stuff; sub-roadbed. The modular sections themselves are built from the same 1/2" plywood, staple-gunned and glued together, using 2x2 block joint re-enforcements. The results are easy for one slightly damaged old guy to manipulate and erect with the help of drywall screws, a DeVault battery drill, 2x4 legs, and a reasonably complete vocabulary. Little of the sub-roadbed is tangent, and using a riser every 12" makes it very stiff in the vertical. The curvature also stiffens the benchwork laterally, so the resulting structure...
is quite satisfactory for O Scale use.

The western terminus of the CTRRA, at Cattaraugus Center, is made up of several modules built by another friend, Rich Randall. These are also well-traveled, having been traction modules he built in Texas. Unfortunately, a gravity-propelled extension ladder had done the scenery a major mischief so, with heavy heart and appropriate weaponry, I "filet-ed" them back down to the structure and re-covered them with 1/2" Homasote.

The two sections of the CS provided a wholly different challenge. They had to be stabilized, re-logged, and adapted structurally to my modular benchwork. Stabilizing the Dunellen Cut actually was pretty easy, but the Summit section was a little more problematic. It originally was double-decked over some hidden storage tracks, and derived all of its stiffness from the structure below. I built a 1x2 frame around the scene to keep it stable, and hung it from the ceiling joists while removing the level of hidden trackage underneath and base structure supporting both. A new base structure was built, and the frame was then removed. It was kind of like lifting a house up and building a new foundation under it.

As it turned out, the best thing I did was to fix the position of the Dunellen Cut as a benchmark and run sub-roadbed cut from it, while allowing the Summit section to "float" until the track relationships were actually established on either end. Only then was the Summit section fixed in place, both in lateral position and in elevation. It was a little tedious, but worked out pretty well.

**Trackage**

I like decent trackage, just so that the maintenance and frustration levels stay at least tolerable, but I never have had the patience (nor have I been in one place long enough) to hand-lay a railroad in its entirety. On the other hand, I had about 600' of old Atlas/Roco flex that I've been carrying around for years. The stuff out in the marketplace today looks a gazzillion (it's an industry term) times better, but the Roco flex is very robust, easy to work, and paid for. The vast majority of the trackage is laid on 1/4" Homabed.

John handlaid the CS sections in code 172 steel. The ends were carefully mated, aligning the insides of the railheads to my lighter nickel-silver, and the mix has caused no issues. On the Dunellen Cut section, a switch lead that went under the "Nighthawks" scene had the clearances carefully enhanced to become part of the outside (leftbound) main. The inside main shoots right up the cut itself. Minimum mainline radii are 56", and grades are 1-1/2% maximum un-compensated. Since the CS trackage was super-elevated, I followed suit on the rest of the mainline trackage, by virtue of being cornered like a rat in a trap.

On the CTRRA proper, conditions are a bit different due to the overall width constraints and the operating scheme. Here, the radii get pounded down to a 36" minimum and grades coming out of Cattaraugus Center run a little over 2% (uncomp'd) to swing around and over the old CS High Line at Summit. The transfer trackage uses #6 Roco turnouts, while the industrial areas use those funky little Atlas #2-1/2 switches from the 1970s and are restricted to boxcabs. Alco switchers, and 0-6-0's. All the turnouts are hand-thrown,
Here's how the structure placement at East Cattaraugus is fleshing out, adding to John Armstrong's East End scene at the bottom of the Dunellen Cut section from his Canandaigua Southern with some careful placement for accessibility.

The trackage has soldered joints and a twisted-pair bus with drops every eight feet or so, and is broken down into fully isolated blocks (as opposed to common-rail). All electrical gaps use insulated joints of some sort. If I plan ahead, I'll throw in a pair of commercial ones. More often there is a decided lack in prior planning, so I'll use pieces of business card CA'd into a cut gap. The CA'd approach has worked out pretty well for me over the years. I've never had a gap close up from rail expansion using this method, which might explain why I still have most of my hair at my age. Since I solder my rail, expansion joints are a requirement. I look the coward's way out by waiting until mid-winter and the low humidity and cutting expansion joints where the track is starting to pull out of line from the shrinking benchwork. Rail joiners soldered only on one side of the joint, with electrical jumpers soldered across for positive continuity, work well.

I've always painted my rail a dark color, just to keep the wandering critical eye from picking up on how marginal it looks. I'll probably continue that practice. I plan on gray granite ballast for the mains and the transfer trackage, and cinders for the industrial stuff. You'll notice that, while form, flow, and reasonably straight tangents have received attention on the mains, the industrial trackage doesn't get much in the way of style-points. I did this purposely, as another visual clue that these are indeed two different properties with two different purposes in life. Once it's all ballasted, I might get to go back and yank all the track nails. Until then, we'll just have to suck up the fact that they're there by painting the heads black, as a tactit nod to camouflage.

**Control Systems**

There are some things I need to do control-wise that are a little outside the norm. Currently, several companies offer locomotives with any one of three different factory-installed control systems, not including conventional cab-control DC, and I need to be able to test 'em all for review in **O Scale**. The ability to switch freely between any of the existing control systems is a requirement that you may not have, but it's one I have to acknowledge. Some healthy rotary switches on the mainlines satisfy that requirement.

The Cat itself is a DCC railroad, and the switchers all have sound installed to keep the switch crew from running at obscene speeds. The mainlines will probably remain mostly operated using DC cab control (now upgraded with a couple of Tom Kabele's 10-amp transistor throttles) because of my desires to swap out locomotives from a stable for larger than necessary.

**Speaking of Locomotives...**

Here is, besides the operations gene, my real soft spot. I build steam locomotives and several friends have their work, which I highly respect, running alongside mine. John's Canandaigua Southern tender-booster equipped 0-8-0 represents him on the roster. Glenn Davis, a longtime friend, introduced me to Bill Lenoe, arguably the scale's most famous locomotive builder. From Glenn came a pair of NYC E7s, as well as a beautiful B&M P4 that Bill built for him. Bill's New York Central K3b runs here, as well. The two CTRRA 'High-Hoods' and a B&M S2 are Tom Landgrigan's work. Tom Har-ley is a brass-bashar par excellence and is represented by a New Haven 4-4-0, a work of art. Tom helped me with several 12 Hudson conversions, as did Joe Foehrke, one of the premier mechanism gurus in the scale. A beautiful hand-lettered Pennsylvania K4 came from Frank Miller. Frank, whose Cascade Valley was one of the most famous O Scale railroads in the Philadelphia area, is also a logo builder of excellent repute. Two other PRR engines are here, an 11 Decapod and an 11 Mike, both built by Ray Jury just after WWI. A pretty sizable stable of B&M Diesel power is the work of John Peterson. Although I like swapping the rosters around, to add a little variety as to locale and era, I'm pretty intolerant about mixing eras or unlikely combinations of rolling stock. You might see Boston and Albany power one month, then Boston and Maine another, all WWI era, but you won't see Frank's wartime PRR K4 sweeping past B&M "Bluebirds" in my world. If my efforts look good running with this crowd, it's because of what all these men have taught me over the years.

There are rosters of passenger equipment dedicated to each era and grouping of locomotives. While there's about a half-dozen of Joe Fischer's masterpieces represented, most of the passenger cars are scratchbuilt, kitbuilt (Oh how I miss the American Standard Kit line), or the modern plastic offerings. Consists for appropriate trains are made up with more

**Cat 542 switches the stores house at Navy Pier, while the USS Halle stands by.**

The port area benchwork is conventional open-grid with a one-inch plywood-homeside sandwich deck. The combination is very stiff while providing a good base for urban scenery and tight industrial trackage.
than just a tacit nod to the *Official Guide*. It sounds a bit neurotic, and it is. With all the era/locale options I enjoy there isn’t a whole lot of room for extra rolling stock, so being a little snobbish helps keep the roster size down.

The freight cars range from brass imports to the latest plastic with lots of kitbuilt and scratchbuilt stuff in between. The only provisions are that a car needs to match a prototype, be appropriate for the locale, be a good model, and be in era. Although there might be a collector gene lurking in me somewhere, too (horror), I do have one rule that keeps it all under control. If it doesn’t have a job here, it doesn’t stay here.

**Buildings and Scenery**

I like urban scenery on smaller railroads for a couple reasons, so that’s what we’re doing here. Structures are useful in front of trackage to visually break up the short trains we run. If you can’t see both ends of the train, your mind doesn’t dwell on the fact that your all-powerful 4-8-4 is only toting 12 cars or so. Building flats have a big advantage over mountain backdrops, especially on benchwork shallow enough to reach all the way across, in that trackage can be right up next to a flat and cast shadows from rolling stock.

The second location works well, but the first proof of the CTRRA operation scheme showed a need for more inbound trackage capacity for the East End Transfer Job.

The third move puts the NEC&C dealer of the solution for the capacity issue, the B&A Jct. Yard. Those adjustments are much easier to make at this stage of the game, rather than when scenery is completed.

with reckless abandon.

As the benchwork and trackwork rose from the rubble, structures were tested in place for fit and purpose. This is actually pretty helpful, as many a spur had already been tweaked to fit the building at this stage of construction, rather than after scenery and the like turn tweaking into major surgery. I recommend the practice. Right now, though, I’m finishing the “test fit the structures” phase, so there’s no telling how the scenery is going to fall together. The next step is to install free-standing dividers and backgrounds, depending on how the different scenes will be broken out.

I’ve incorporated some stationary sounds in various places as an experiment. It’s a cheap boom-box (loaded with a continuous CD of port sounds from Fantasound) tucked under the pier, for example, that adds some “audio scenery” to the area even though the Homanoe is still showing. Another one, this time a 1940s city track, is squirreled away over by East Cattaraugus. The trick here is to keep the volume way down, so the appropriate sounds stay within the visual scenes.

**Operations**

You’ll probably find following the track diagram to be useful at point zero, to help clarify the operating scheme. This is really what the design concept boils down to, and I’ll key the text to the schematic for clarity (I hope).

Currently, three switch crews can be kept gainfully employed while the rest of the Harrisburg/Gettysburg O Scale bunch can supervise from the comfort of their respective chairs (while not being in the way of the traffic) and watch the mainline stuff go by. By the way, these folks have been most gracious in welcoming me to a new O Scale community; what an enjoyable bunch of guys to railroad with!

While the mainline operation is nothing more complex than the continuous orbits of whatever I personally want to see running at the time, the Cat itself is a point-to-point design based on a centered node of operation. There are three districts, each governed by switchlist. Operations center around East End Tower (1), where CTRRA 573 is assigned as the transfer engine. Cars are pulled from the B&M at the West Interchange (3), which is a little eight-car two-track yard.
themselves can then be sorted (the “classification yard” function) in those several little short yards in corners that would otherwise be useless for the purpose, while the final makeup of trains (the “advance yard/receiving yard” functions) is done on the run-around track. An important added benefit for us is that you get more opportunities for play-value with several small car-sources, and can tuck them into tight small spaces. The “big yard in the middle” norm eats up lots of real estate many of us in O Scale can ill afford to lose, so this is a concept worth thinking about.

The industrial area at Cattaragus Center is usually assigned CTRRA 541, one of the HH600s. This job switches a complex including New England Forwarding (a large LCL house) (16), Lundgren Gear (13), a light petroleum product distributor (14), the B&M freighthouse (23), and John Armstrong’s Lugubrium plant (relocated from the Canandaigua Southern) (15). Some 30 cars are handled per session/day, here.

The Port Job, usually assigned CTRRA 542, works the area around Navy Pier and the City of, well, I guess I need to pick a name. A storehouse (12) receives reefers and boxcars loaded with supplies for the Navy ships of the Atlantic Fleet that are based here. Ammunition is delivered to a magazine (11) in wooden boxcars, flats arrive and depart the Atlantic Shipfitters yard (7) where a large overhead crane transfers ship components to oversized trailers for pier-side reftitting jobs. A siding is also in place, pier-side, for open cars to deliver those supplies requiring the help of a soon-to-be built hammerhead crane (6). Add to the Navy traffic the day-to-day business in town, at Peterson Machine (9) and the local freighthouse (10), and the company cars in and out of the CTRRA engine terminal (8), and you end up with some 30-40 carloads a day moving in very tight quarters.

Where We’re Going…

You’ve probably noticed a lot of name-dropping throughout this article. Looking back, I’m amazed at how many, in some form, have made a thumbprint on this latest effort. If I had stayed the lone wolf I originally was years ago, I would certainly have missed out on all the tricks and techniques these guys have freely shared with me. If you come away from this tale with anything of value, I hope it’s the realization that friends can really increase your chances of building a satisfying railroad. I’ve been having more fun building and operating with a group of like-minded folk than I ever did as a lonesome. In that vein, I hope the passing on of some of the ideas here might be useful to you, especially if you feel a little space constrained. As things develop I’ll keep you posted, and perhaps in a few years we’ll revisit the Cat in a more traditional “finished railroad” style article. I probably could have planned this better, but we’re having a lot of fun trying the opposite approach. It might win for you, too.

Finally, I’d like to thank the Armstrong family. Every time we operate the Cat, I’m reminded of their generosity.
The Search

Model railroading is a diverse hobby. Some like to build rolling stock and mechanical stuff while others like layout design, scenery, or other creative pursuits. There are collectors who have to have one of everything, and I suppose there is even someone who likes wiring. My own interests lean toward the artistic side of things. Up until now, modeling rolling stock hasn't been much of a draw for me. That's beginning to change. I've written before about a freight car project I've been working on. While I had a good start, things ground to a halt quickly. Working in P48 has increased my level of awareness and my modeling standards, and I wanted to do a better job on this car than my past efforts. The problem was in finding prototype information, especially dimensional data.

The particular boxcar I'm modeling was built in the 1970s, so one would think that prototype info wouldn't be that hard to come by. Well, I've had a time finding what I wanted to know. Most of my friends and P48 mentors model the steam era. They directed my search to several different sources, but to no avail. Subsequent searches of a modern (1980) edition of the Car and Locomotive Cyclopedia were also less than satisfying. I contacted some well-known modelers via e-mail who have written articles about these cars, but no luck when it came to the dimensions. One very helpful gentleman told me about a Yahoo group for modern freight cars. I thought, "Great." So I signed up and posted my request and waited, then waited some more, and still waited. I re-posted my request, identifying myself as a new member of the group and received a reply saying that no one knew of or had any plans or dimensional data on the cars ("very common car though"). I was starting to get a bit perturbed, because I wanted to move forward with the project.

Up to this point, my only source for dimensions of the boxcar was an HO model by Athearn. This was supposed to be very accurate, so I used it to draw some plans while I kept looking for more concrete data. The Athearn model is pretty accurate, except it is way too wide, something I did learn from the Yahoo group. I was about ready to just plunge ahead with the model when I stumbled onto a used copy of the 1981 Official Railway Equipment Register at a hobby shop (Volume 96, Number 4, to be exact).

I had heard of these books before but had little interest in one until this project came along. For those of you who may not be familiar with them, the ORER is a directory listing all the equipment in service for each railroad in a given year. (The listing for Conrail covers 104 pages!) This volume also contains a wealth of useful info for modeling. Not only did I find the dimensional data I wanted, the book also has sections on car service rules that govern the handling of freight cars from one road to the next, instructions for loading of cars, and connecting roads and junction points for each line. There are diagrams explaining the Plate B, C, D, E and F clearance charts, and tons more useful stuff for modelers interested in prototype operations. Armed with all this new-found knowledge, the boxcar fleet for the Indiana and Whitewater can get underway at last.

Researching prototype data can become a hobby in itself. Depending on what you're looking for, the results can be mixed. Sometimes you get lucky right off the bat and find what you need. Other times the search can drag on for weeks, months, or even years. Persistence seems to be the key, as it is in so many other areas of life. This particular quest took a couple of months. Stumbling onto that copy of the Official Register was just happenstance. I wasn't looking for it; it just showed up. (Providence smiling maybe?). Knowing where to look is half the battle. Common sources are the Official Guide, the aforementioned ORER, Car and Locomotive Cyclopedias for your era, and so on. If your line has a historical society, their archives may be worth the price of membership. Let's not forget the web. For steam-era modelers, Ted Cullota's Steam Era Freight Cars site is a treasure trove of good stuff (www.steamer aflightcars.com). For the modern-era modeler, try the Modern Freight Car List on Yahoo (groups.yahoo.com/group/MFCL). Be aware that these chat-room types of discussion groups, like the MFCL, can be a hit-or-miss affair. Someone may have the answer you're looking for, but maybe not. The conversation and subject matter can get a bit esoteric at times, as everyone is likely to be in their own little world. Patience and courtesy are the order of the day. While prototype research can be frustrating, when you hit paydirt it's worth the effort. Guess I'll have to redraw those boxcar plans once again.

Best regards,

Mike
Pennsy Mikes Roll Out

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The all-new O Scale Premier Line Pennsylvania L-1 Mikado is scheduled to roll out this Summer in both scale or hi-rail wheel versions. M.T.H. is the only manufacturer who gives you scale or hi-rail wheel locomotives that can run on 2-rail or 3-rail track, operate on AC or DC power and come fully equipped with digital sound, synchronized puffing smoke and locomotive speed control for incredibly realistic operation. If you’re looking for a locomotive that runs as good as it looks, see your M.T.H. Authorized Retailer today for a check of the finest, best equipped O Scale locomotives available today.

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New! O Scale Birney

This is a true O Scale 1:48 model. The die was made from the drawings of a real Birney!

The model comes with a complete interior, less power and lighting package. $35.95. We expect a 4-wheel power truck kit in mid-April, followed by the lighting kit.

Pa Heritage Models Ltd.
715 Ridgeway Road, Birdsboro, PA 19508
www.paheritagemodels.com
Bridge Crane
Overhead bridge cranes were located at various places including the roundhouse, 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 15' 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 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'.

#17405 $49.95

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.

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Drying Kiln #18230 $139.95
Slatyfork Sawmill #18300 $850.00

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JOHN S. HUBER

Weaver recently came out with another fine model, the World War II troop sleeper. The underbody detail is very good, as is the end detail. The air hose, signal, and steam lines I had a problem with. I understand that it had to be made to accommodate the three-railers, with their large couplers operating on short curves. Being a two-railer, though, I had to change that. This was a very easy modification and did not require any special skills.

First, I cut off the brackets that held both the air hose and steam line, and discarded both. While I was doing this, I noticed that the bracket that held the coupler stood too far out past the end of the car for my tastes; the coupler stuck out beyond the face of the diaphragm by about a coupler-head. First I removed the coupler and cut the free end of the bracket back about 1/8". I then drilled and tapped (2-56) new coupler mounting holes.

Caution should be taken when drilling and tapping into this bracket. It is a very hard steel. I broke a tap trying to tap new holes. Use a light oil and take your time, so as not to break the tap. After this is done, set it aside.

Remove the two screws on the end of the car (Photo 1). These will hold your new steam line/air line assembly to the bottom of the car when you're done. I cut a piece of 0.030" brass, 1/4" wide by the width of the car and drilled two holes matching the screw holes on the bottom of the car. Screw your plate in place for a test fit. Now screw the coupler bracket back in place over the brass plate. Mark the both edges of the coupler bracket/box on the plate. These marks will be used to locate the new steam line bracket (to the left of the coupler) and the signal line bracket (to the right of the coupler).

I fabricated the brackets from 0.015" brass, soldered to the base plate and bent down 90 degrees. This will allow you to solder for glue, if you prefer) the brass castings to the brackets. Make an additional bracket on the extreme left end of the plate that will hold a eye pin for the coupler lift-bar (Photos 2 & 3). Bend a coupler lift-bar from 0.015" brass wire. I attached mine below the coupler box using a small plate screwed to the bottom of the box with one of the coupler screws; you can see it in Photo 1. It was fabricated from a piece of 0.015" brass with a clear hole for a 2-56 screw. I soldered a piece of 3/32" brass tubing to this plate, to allow the coupler lift bar to go through the tubing and pivot. I found that merely gluing the lever to the box tends to make them prone to breakage if bumped or in a train derailment. My method may take a few more minutes to make, but the result is more robust and I think it looks better. It moves, too.
Anyway, screw this plate to the coupler box. The completed assembly is shown in Photo 4. Photo 5 shows everything mounted on the car, prior to painting. The only thing left to do is paint everything and reassemble the bottom of the car. The car is now ready for weathering. Photos 6 and 7 show both cars completed and ready to go into service. This makes a great addition to any passenger train.

Bill of Materials:
- 0.015" Sheet Brass
- 0.030" Sheet Brass
- 0.015" Brass Wire
- 3/32" Brass Tubing
- Precision Scale #4716 Air Hoses (4)
- K&D Casting Steam Lines (2)
- 2-36 x 5/16" Screws

Grand Central Gems

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Outstanding quality that would appeal to even the most discriminating scale modeler. Hand carved natural cedar tunks and finely detailed pine boughs.

Lodgepole pine is a species which grows throughout the west, as far north as the Yukon and south to Baja California. It ranges us to the Black Hills of South Dakota and west all the way to the Pacific Ocean. Sierra lodgepole pine typically grows to a height of 90 to 100 feet and an average diameter of 15 inches or greater.

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Lodgepole Scale Chart

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During WWII, most troops moved around the country by train. There were not enough passenger cars to go around, so the government requested a fleet of "quickie" cars. These were the so-called troop sleepers (which also included troop kitchen cars).

The troop sleepers were built essentially like 50' boxcars, but with flat ends, diaphragms like regular passenger cars, and windows cut in the sides. Instead of a vestibule, there was a centered side-door, much like a subway car. Passengers squeezed into three tiers of berths for sardine-like comfort in the sleepers. The cars rode bouncy and they oscillated on bolted track, adding to the travel experience.

After the war, the Boston and Maine Railroad, like many others, bought these surplus cars and converted them to express cars. Weaver Models has offered plastic models of several versions of these cars, both as-built, and as converted to express cars. However, none of the models duplicate any of the several B&M conversions, although the single door model comes close. In this article, I'll show you how I converted that model to more closely match a B&M prototype. My thanks to John Peterson, noted B&M modeler, for his help in researching details for this conversion.

First, disassemble the car. The good news is that the underbody detail is correct, and is pretty well done. The trucks are a bit wide to accommodate three-rail wheelsets. You may want to replace them with a set of brass trucks from Precision Scale, though I didn't. The brake and steam lines are too far out towards the sides of the car; just cut them (and the tabs that they are mounted on) off. To move them inward, I simply glued a short piece of tubing to some PSC brass hose castings, and then glued them to each side of the coupler box (Photo 1). Paint them black.

The carbody gets most of the attention. Remove all of the grab-irons on each side of the car. They pop out easily. The B&M cars had horizontal grabs on the ends of the car, and a long vertical grab on the left side of the door. Use fine brass wire to make new grabs for your car. The horizontal grabs are about 5/8”. The vertical grab next to the door is 1-1/4”. Fill in the old grab-iron holes with putty. Be neat. See Photo 2.

The major change to the model involves the door. The B&M single-door express car had seven-foot doors, while the doors on the model are six feet wide. I decided it was too painful to change this without messing with the rivet lines on the side, so I'd just live with it. The big appearance difference is that the B&M car had five-panel doors with windows. I narrowed the panels proportionally to fit them in the six-foot door. To model these doors, I cut out the upper door for the windows, sanded off the cast-on hardware, then covered the entire door with 0.005" styrene. You can see the window cut-out in Photo 3, and the styrene door covering in Photo 4. Use a new #11 blade in your knife for this work.
The dimensions for this work are as follows. For the window hole, leave a 1/16" lip around the top and sides. The hole is about 1-1/4" by 9/16". The door feature dimensions are 3/32", 1/8", and 1/4" vertically, and 1/8", 1/16" posts, and 1/8" horizontally per feature. The window openings are 3/16" x 1/2". The door panels are 3/16" x 3/16".

Now glue the styrene panel over the door opening. While you've got the 0.003" styrene out, cut panels to cover the end windows; the B&M cars had blank end-doors. Next, fabricate new door steps. I just cut the old ones off. The new steps go on the left side of the door as in Photo 5. Photo 6 shows the car ready to paint.

The car was painted B&M Passenger Maroon. Ask several B&M modellers and you'll get several answers as to what is the right color. I painted mine with a mix of AccuPaint Passenger Maroon and Deep Red, about one part maroon to three parts red. I used a Microscale decal set (#48-598) to letter the car. The cars were numbered 3225-1249.

Reassemble the car; weather to your taste. Remember, express cars usually were directly behind those sooty steamers and rarely visited the wash racks with the varnish. The finished car is shown in Photo 7.
Tools of the Trade

Every serious modeler has his own list of “must have” tools for use on his model railroad. Serious scale model railroading is very personal in that each person decides the level that he/she wants to model. So, too, are the modeling tools required to get the job done. Whether scratchbuilding, adapting, kitbashing, or tweaking, all projects require some basic tools.

This column features this Hobo’s journey in search of more scale and more realistic modeling. The basic screwdriver and small pliers set that I used for many years has become just that, basic. As a modeler who is transitioning from Hi-Rail model trains to O Scale, I have come to appreciate a more sophisticated list of tools that I have found to be essential.

Straight-Edge Safety Razor Blade

These are a necessity for anyone considering any serious level of detail modeling. Most materials are going to have to be slightly trimmed to modeling specifications. The single-edge blades with the guard on the other edge work wonders in providing a simple, clean, and efficient trim or cut. These are usually sold in 100-count packs, which is convenient in that you will use a lot of them as your modeling improves. I recently learned that, if you start each new project with a new blade, it will make all of the difference. Even though blades appear sharp, they soon dull after use.

De-springing Nipper

Whenever you work with plastic kits, you will have those little tabs where the parts were connected to the sprues. Using a nipper will separate the parts from the sprue with a nice clean cut. This doesn’t damage the part saves time (less sanding). There are a lot of nippers around. Choose carefully. Look for a tweezer-type model that is made with quality stainless steel. My favorite is Swiss-made, and works like a surgical instrument. Don’t skimp on the quality; it will get a lot of use.

Precision Screwdriver Set

There are lots of these sets out there, but the key word is “precision”. Ever use someone’s inexpensive miniature Phillips head screwdriver? Ouch! Not only do they fail to hold up, they can easily strip the head of the screw, causing stress, frustration, and even later problems. Some of the best sets are made in Germany and feature lifetime black oxide tips along with finger-tip rotation cups on the handle ends. Usually a set of seven drivers will accommodate all the requirements of precision modeling. Reasonably priced, these are the workhorses of the hobby. A little investment now will pay off big dividends as your hobby skills mature.

Drill Bit and Screw Cage

This handy little gage will take some of the guesswork out of modeling. As your modeling skills improve, you’ll save time as you will get the hole right the first time. “Accuracy” is the key word with this helpful tool. Whether measuring drill bits, screws, or small dowels, you will be able to determine the exact size required for the job.

Set of Mini Precision Pliers

There are many, many pliers available for the model railroad craftsman. These need to be used just for modeling purposes, in order to save you time and the frustration of finding them. Leave your regular work pliers at the workshop or in the toolbox; they get enough use around the house. Your hobby set needs to be with your hobby. Making a small investment now will lead to years of service and satisfaction. Choose a good-quality brand, starting with a flush cutter, an extra-long needle-nose, a short needle-nose, a flat-nose, and a round-nose. These will accommodate most jobs you will encounter on your model railroad. If you know someone who works in the medical field, you’ll find that surgical clamps and hemostats are some of the best miniature pliers available. –ed

Emory Board

Most sanding jobs with models involve small detail sanding. I have found that emory boards like the kind your wife or significant other uses to file their fingernails is probably one of the most frequently used tools on my list. Purchase your own. These are readily available everywhere. While not intended for modelers, they are easily adapted for our use. A couple of swipes with these small boards and the edges of your project will be smooth and even.

Clamps

If your projects will ever require clamping while gluing or fitting, miniature “C” clamps will also be a requirement. These come in various sizes, but the basic 1” and 1-1/2” sizes will serve most of your needs. Trust me. There are larger ones available for carpentry work, but these little guys will be the most helpful with model building. Once you use these little “C” clamps, you’ll continue to find uses for them as they fit into a lot of small spaces. We all know that there are a lot of layouts with small spaces.

Razor Saw & Mini Miter Box

For making straight or mitered cuts, the razor saw and aluminum miter box works very well. The fine teeth of a good razor saw help make for precision cuts with minimal burn. The miniature miter box acts as a cutting guide, and will help with straight and angled cuts. Just follow the old master carpenter rule, “Measure twice and cut once!”

continued next page
Scribing Awl
This tool ranks as one of my most used tools on the pike. I use it to mark the center of holes before drilling, making small pilot holes before installing screws, and for enlarging existing holes. By placing the point of the awl on the exact spot and applying a little bit of pressure, it will mark the location perfectly.

Micro Drill Bit Set
For ultra-small drilling, you'll need a set of ultra-sharp high-speed drill bits. The most common sizes range from #61 (0.039") up to #80 (0.015"). These will accommodate most ultra-small drilling requirements that you will face. It is highly suggested that you consider a pin vise or tiny hand-drill to hold the bit while you drill. There is also available an adapter chuck that allows you to use these tiny bits with your full-size electric drill. I find that I use my mini-drill bits a lot more than I originally thought.

Drill and Tap Set
Taps are for putting threads in a hole made with a tap drill. You select the tap that is required for the project, then you select the corresponding tap drill. Once you drill out the hole, you use the tap to put the threads in the hole. This is especially helpful for scratchbuilders or modelers who want to install added details on custom projects. Once you find that you need these, you will not want to go without. They are very useful.

Of course, there are many tools too numerous to mention, but I've attempted to list what I've found to be the minimum (and most useful) in my modeling ventures. I hope you find this list helpful. I'll leave you with a few words of caution. The right tools do make the difference. Always be careful when working with tools and exercise caution. Also, be on the lookout for a sly character seen on a lot of railroad pikes, Jerry Rigg (aka “Short Cut”). He is known for his shoddy work and resides in the camp of Mediocre ville on the road to Disaster!

Editor's note: A good source for modeling tools, as many of us old hats already know, is Micro-Mark (1-800-225-1066, or visit www.micromark.com).
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- #3000 EMD F3-Ph3, F7-Ph1, 36” low fans, 36” dynamic brake, 3 portholes, horiz grilles
- #4000 EMD F7-Ph1 (late), F7-Ph2, F9, 36” low fans, 48” dynamic brake, 2 portholes, Farr (vert) grilles

All kits include brass etched grilles, appropriate detailed parts, and preformed grab irons for indicated model. These kits include only the parts above the frame.
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22 - O Scale Trains - Sept/Oct '07
A View From The Cab

In modeling current-day railroad operations on our layouts, let's take a moment and view the perspective through the windshield of a locomotive on the BNSF Birmingham Sub-division, as it applies to any prototype location, or era that you might model.

The first half of 2007 has been a time of major mainline improvements with track upgrades. The mainline has received new ballast, crossties, and rail, along with the undercutting of miles of track. Sidings have also received the same attention, with several having new 40 MPH high-speed turnouts installed in order to expedite train meets. Three sidings have been extended from 7000 feet to over 11,000 feet, and two new sidings are under construction. Photo 1 shows the new extension to the north end of the siding at Gatman, Mississippi. All of this is being done in order to handle more traffic in an efficient manner.

New locomotives and freight cars continue to be purchased, and new trainmen and engineers are being qualified to handle the expected increase in operations. BNSF’s Birmingham Yard will even be upgraded to handle this new traffic, with the construction of a dispatcher-controlled CTC mainline that will traverse the yard and connect with the CSX and Norfolk Southern mainlines. Other yard improvements will include rebuilt switching leads and the creation of long yard tracks to hold entire trains. All of this is just the plan for 2007, as more improvements have been announced for the coming year of 2008.

As history shows, the railroads have modernized with the introduction of new products and equipment since the age of steam. In all eras, there appears to be no exception to the idea of expanding and improving operations. Many small railroads have merged together to form larger and more efficient operating systems over the years.

As modelers of railroad operations, our interests are as varied as the history of the prototypes. We should always bear in mind that, regardless of the time period we model, any operation is a combination of new and old technology. As current-day operations go, we have the latest model locomotives in service, as well as units that were new 40 and 50 years ago in some cases. Let's not forget the restored steam locomotives in operation today. Their "new" date goes back further than some of us. Rolling stock is no exception: freight equipment from the '50s and '60s is gone for the most part, while some privately owned and restored passenger equipment remains in service. Structures that were new at the turn of the 20th century, and once commonplace, are being razed and replaced with more modern buildings everywhere along the right-of-way.

One thing that I have learned from my modeling over the years is that there will always be room for improvements. As hesitant as some may be, most of us will upgrade from the old to the new as new and improved products are introduced into the market. There is also the "What if?" factor built into every layout, my case in point.

Early one morning a few weeks ago, after a late night train trip home and a couple hours of sleep, I made my way down to the train room to enjoy that first cup of coffee. After turning on the lights, and viewing the layout in a somewhat lethargic state of mind, it struck me that a crossover between Main One and Yard One would create an optional passing track. Why I had not seen this possibility over the last few years is unexplainable. The turnouts were ordered and received, so now it's up to the track and signal gang.
The same scenario happened again, a few days ago. While looking over the layout, it occurred to me that if I would relocate the electric power plant and the rock crusher (both major industries), the result would be the creation of an extra industrial area with service tracks for either another large industry or multiple industries. The plan has since expanded into the construction of a new service track with more switching, once the structures are relocated. Keep a check on the CST Blog for construction updates.

Being fortunate to live in the time of a healthy hobby environment, with our support this hobby will continue to expand and grow. Don't resist change; it can be a pain, but it can also be a challenge. Last, but not least, don't forget the National Convention in Indy in September; hope to see you there.

"Now you know what we do while sitting in the siding waiting to make a meet. We write columns".

---

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<table>
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<tr>
<th>Item</th>
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<td>1465 Man to sit at table</td>
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<td>1478 Clothesline with Clothes</td>
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Sept/Oct '07- O Scale Trains • 25
Building a Small O Scale Layout
Part Seventeen
Michael Culham

We left off in Part 16 with our roadway in place and painted (Photo 1), but the road does not look quite realistic enough. It needs that little something to finish it off, so that will be our topic in this issue. The first thing that is needed is lane markings.

Lane Markings

Lane markings are used to separate the lanes of traffic. I have seen lots of different ways on how to make these lines on the road, from masking off the area and painting it to using pinstriping. As you have found out in this series, I like to keep things simple. I just use a white pencil and a straight-edge ruler. In Photo 2, you can see that I have laid the straight edge down the center of the road and I'm drawing the lines down the road with the pencil. It can't get any easier. In Photo 3, you can see that I have drawn the stop line and the railroad crossing markings with the same pencil. It took about ten minutes to do everything.

Dirty Roads

With the lane markings done, now it's time to get dirty. The only time I have ever seen a nice clean road is just after they've paved it. After a few years of traffic running on it, and Mother Nature's four seasons, those new roads start to look a little worn. Here is how I create that appearance. First, I paint them with Harbor Mist Gray paint, which gives that weathered look that asphalt has after a few years. Then, as you can see in Photo 4, I brush on some black weathering chalk down the middle of the lanes to represent the oil streaks left from years of oil dripping from cars. Photo 5 shows that effect in the two lanes. Then, take a chalk wash and run it along the gutters to give that grimey look (Photo 6). Next, brush on some gray chalk along the asphalt lanes to give them a more weathered look (Photo 7). I then take some earth-colored chalk and brush it along the edge of the road and in the gutters to give the look of dirt that has gathered.
tered over time (Photo 8). Put all these things together and you have a realistic road for your autos, as seen in Photos 9 and 10. To weather your sidewalks, first put on a black chalk wash to accent the lines. Once that has dried, brush on some black and earth colored chalk to dirty it up (Photo 11).

**Filling the Gap**

Well, our road and sidewalk are all done, but there is still something that we have to do. We need to finish the scen-
ery along the side of the road. Because we had to raise the road up to the railroad crossing, there is a bit of a gap here (Photo 12). To fill this in, I use some pre-mixed plaster. First, I put masking tape along the edge of the road, and over the tracks and ties, to make sure that I do not get any plaster on them (Photo 13). With this done, I take a small piece of scrap styrene sheet, to use as a spatula to spread the plaster (Photo 14). Allow the plaster time to dry, then paint it an earth color (Photo 15). Then glue down the scenery materials as I described earlier in this series (Photo 16). There you have it; our road is all finished (Photo 17).

In Part 18, I will be showing you my finished layout, where I have used all the techniques that I have shown you. I will also describe how I run an operating session on it.

So, until next time. Happy Modeling.
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FRF, SF, UP...$125-$195
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40’ Trailer, B&O, C&O, J&F, C&O, RR...$49
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37’ Reefer, ERIE, RR, NYC, CNJ, CNJ, more...$275-$350
57’ Mechanic, SF, ERIE, RR, SF, UP...$165-$415

Covered Hoppers - 2 rail
25’ C&O, J&K, RJR, B&O, J&D, RR...$300-$500

Hopper Cars - 2 rail
Atlas - B&O, NY&NH, SOU, BN...$157
D&RGW, CNJ, UP, D&RGW, CNJ, BN...$55

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Sept/Oct ’07 - O Scale Trains • 29
Building Multiple Kits

Just recently, I had to build a number of Intermountain reefer kits so I decided to build them on an "assembly line". For you, this probably means clearing the workbench so you can have the numerous parts arranged in some kind of orderly fashion. I am fortunate to have a spare room for my hiking gear since the kids left home; this is the space I used to build the cars.

I am not going to tell you how to build the cars, just show you my method of going about setting up the "assembly line". The photos show how I used numerous plastic containers to hold the parts until they are needed. The original cardboard kit boxes can also be utilized for the larger parts.
Traction Action

Roger C. Parker

My wife often asks me, "Why do you buy so many railroad books?" The answer is simple. There's always at least one great photograph in every book, a photo so captivating and inspirational that it justifies adding to my already overcrowded bookshelves. Even though books are focused on specific railroads and geographic areas, their photographs can spark an idea that can be applied to electric railroads in any part of the country. Here are some of my favorite photographs, from recent Arcadia Publishing books, focusing on electric railroading in San Francisco.

Railways of San Francisco, by Paul C. Trimble

The "star" of this book is the 1919 photograph of the triple streetcar loop in front of the San Francisco ferry terminal. Access to San Francisco, from the north and east, was by ferry terminal, and most ferries loaded and unloaded there. Indeed, with eight slips the San Francisco ferry terminal soon became the second busiest passenger terminal in the world! This was quite an accomplishment, given not only its New York City and Chicago competition, but also competition from London's many crowded terminals.

What makes the photograph (located on page 109) so interesting is that it would be a great module for a traction club, as the ferry terminal could be modeled with just a few inches of depth, or even just painted on a background. Adding to the interest of the loop is the fact that one of the loop tracks shared space with the steam line serving the San Francisco waterfront. The photograph on page 108, showing scaffolding around the Ferry Terminal tower, provides additional modeling inspiration.

The Key System, by Walter Rice and Emiliano Echeverria

Another great source of modeling inspiration for traction modelers is the photograph on page 24 of Arcadia's The Key System: San Francisco and the Eastshore Empire. In some ways, this is "just" a three-track stub-ended station.

However, because of its beautiful proportions and extensive timbered planking, it would create a dynamite "hub" for a layout or module. Again, although those with endless space might want to model the adjacent ferry terminal itself, the terminal could be just a few inches deep, focusing the attention of layout operators and visitors on the action taking place as cars arrive and leave from the loading platforms.

One idea might be to "relocate" the three-track trolley terminal to a location adjacent to a geographically distant station, like the Rutland's St. Johnsbury, Vermont, covered station. Again, the space-eating "connection" could be suggested, with the primary emphasis placed on the three-track train shed.

Alameda by Rail, by Grant Ute and Bruce Singer

Last readers comment that I'm only interested in large traction terminals, I'd like to share a third (more easily modeled) photograph from a recent Arcadia book, Alameda by Rail. I'm referring to the vintage Morten Street station on page 76.

This small station, with a canopy covering the sidewalk, would make a great addition to any traction layout that features street running. The station also would provide a location to show off any vintage automobile models you may have accumulated.

Takeaway Idea #1: Model a three-track loop in front of a building flat representing a ferry terminal.

Takeaway Idea #2: Model a three-track traction tramshed next to a ferry terminal or large steam railroad station.

Takeaway Idea #3: Model a passenger shelter next to a street where trolleys pass by.

Conclusion

Inspiration is everywhere, if you look for it, and books are one of the best places to look!

For more information

www.ArcadiaPublishing.com
The Key System, by Walter Rice and Emiliano Echeverria. ISBN: 0738547220
Alameda by Rail, by Grant Ute and Bruce Singer. ISBN: 0738547069
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Weathered Rail

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Non-Weathered Rail

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Non-Weathered for Outdoor Use

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Right-O'Way Steel Rail/ House of Duddy Ties

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Sept/Oct '07 - O Scale Trains • 33
AMS D&RGW Diesel Switcher Arrives

American Model Supply, a division of Accucraft Trains, has finally started to receive its new O Scale narrow-gauge Davenport Diesel switchers from China and they are superb models (see page 25). The first production run is the D&RGW #50 version, and it can be compared to an identical PFM Fujiyama brass model that was introduced around 1972.

Both models share identical dimensions, but the earlier model was unpainted, had no glass in the windows and was pretty bare. The new model is painted for D&RGW #50 and has thin plastic in eight of the ten windows. It has a fully detailed cab interior and is surprisingly heavy. The can motor allows it to run slowly and smoothly and it is DCC-ready. The #50 is available in both On3 and On30.

The pre-production sample models had no couplers, but it was a simple matter to install On3 or On30 couplers in the appropriate pockets. I coupled mine up to three steel two-bay hoppers, loaded with aquarium gravel, and the 30-ton cruffer pulled them around my test layout without any problem. When it came up behind 14 more empty (but weighed) freight cars, it pushed them along too, although there was a bit of wheel spinning.

Some months ago, I wrote to Accucraft and suggested that they might sell more models of a generic Davenport 30-ton industrial locomotive than the D&RGW #50 version. The full-size model was used as a yard switcher at Durango only from 1964 to 1970. That was near the end of the D&RGW as a narrow-gauge freight-hauler, just as the tourist passenger trains were becoming more and more popular between Durango and Silverton. Most models of the D&RGW in O Scale operate in much earlier eras, and the colorful little Davenport came along long after the heyday of Colorado mountain steam railroading.

The folks at Accucraft said they were very interested in creating an earlier version of the Davenport, during its previous career on the Sumpter Valley Railway in Oregon, as well as industrial versions in several colors. Briefly, Davenport #2245 was built in 1887 for the SVR, where it worked until 1963 as SVR #101 in several lettering schemes. In 1963, it was sold to the D&RGW and shipped by rail to Denver. There, it was modified slightly, repainted black and Grande Gold, and assigned to Durango as the yard switcher. After only six years on the D&RGW, it was sold again, in 1970, and shipped by truck to the Roaring Camp & Big Trees tourist line in California. After a few years of service, it suffered major damage to the rear axle-gear and never operated again. In 1981, it was returned to Colorado for display at the Durango Railroad Museum. The Colorado Railroad Museum purchased it in 1984 and it is currently undergoing complete restoration.

The SVR version might be produced in the near future. In the meantime, Accucraft has announced that it will enter the O Scale narrow-gauge market in a bigger way, with new models of a Plymouth switcher, 30' boxcars, and tank cars, either lettered for a number of lines or undecorated. All models will be available in both On3 and On30 gauges [www.accucraft.com].

To remove the engine cover and install a DCC module, pull the front handrails out of the holes in the radiator and bend them slightly forward to avoid scratching the radiator housing. Remove the compressor cover from the front right corner (one screw) from below the floor. Remove the one screw visible at the rear of each air reservoir tank and one screw from each of the four corners of the cab. You will definitely want to install a well-painted driver figure in the left cab seat with his left hand near the throttle lever. Yes, the driver sat on the left side of this Davenport.

D&RGW collectors will welcome the On3 model and On30 modelers will probably prefer the industrial versions. A complete switching layout can be built around this model. Now, we will wait to see who provides an appropriate sound system.

Once again, as another major manufacturer moves into O Scale, it is a great time to be an O Scale enthusiast. Happy trains to you until we meet again.
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Fitting an O Scale layout into a small room means that every inch of space counts. To have enough room for the layout and a nice workbench, in my 10' x 24' space, I decided to set the height of the benchwork at 37" and tuck the workbench underneath. This gave me an eight-foot long, 24" deep work area where I could consolidate modeling activities and material storage without overcrowding the room itself.

I built the bench and base cabinets out of 3/4" oak-veneer plywood with solid oak trim (Photo 1). The drawers are made of 1/2" birch plywood with 1/4" dividers, as needed. Heavy-duty drawer slides were used, because they hold up better to frequent use. You could certainly use less expensive materials, but the hard-wood plywood is a delight to work with and takes a nice finish easily. Being an artist by profession, the visual appearance of the units is as important to me as their function.

Building the units myself allowed me to customize the storage to fit the materials I use the most. Styrene is my primary scratch-building medium, so I dedicated two drawers to the storage of strip and sheet material (Photo 2). The dividers keep the various sizes of Evergreen strips neatly separated, so finding the right one is simple. Other drawers hold tools, like a homemade cutter for large sheets of styrene, paints and other supplies, along with the usual assortment of modeling tools.

The bench-top storage consists of shallow-depth shelves that hold the most frequently used items (modeling knives, scale rules, glues and the like). When organizing tool storage, it makes sense to put things at the point of use and within easy reach. Since I'm left-handed, I put these items either in front of me or to my left. My Dremel motor tool is hung on a hook to my left and is easily reached (Photos 3 & 4).

The lighting is provided by kitchen-cabinet fixtures mounted underneath the layout. These give off plenty of glare-free light, which my middle-age eyes really appreciate. With the lights mounted underneath, I'll have to relocate a couple of switch motors to the top of the layout, but hiding them in the scenery won't be a problem.

Headroom between the bench-top and the underside of the layout became something of an issue. I reduced the thickness of the benchwork on this end of the layout to keep from scraping my noggin. Since the span isn't more than 6', I'm not worried about anything sagging.

Power to the bench is supplied by a multi-outlet power strip mounted up high along the back wall. This location helps keep cords out of the way of delicate work. Finally, for enjoyable work sessions, a comfortable, adjustable chair is the most important tool of all (Photo 5).
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42 • O Scale Trains - Sept/Oct '07
A Working Crane Car

Gerald Brothers

This is a working O Scale model of a very early "Armstrong" 20,000 lb capacity crane car, built for the B&O railroad. The plans for this car are in Train Shed Cyclopeda No. 57 (published by Newton K. Gregg) on page 87. I never have found a photo of this car, so I had to puzzle a few things out from photos of similar cars. I took a few liberties in the name of simplicity. The pillar in the plan is tapered quite a bit, but I made mine straight, for example.

The model can be operated just like the real thing. The crank arm slides horizontally to engage either the boom drum or the hook drum. I didn't make the slew mechanism work, as that would have required bevel gears and I ran out of expertise at that point. The two gears on the back that would have accomplished that motion are just for show. You will notice that there are two hooks, one connected by a black "rope." This one goes over a pulley down through the middle of the pillar, over another pulley at the bottom of the car, and extends out the end. Here, it is wrapped handlely in place so that when more pulling power is needed, it can be hooked to a locomotive. I used bright shiny chain, for the most part, because it shows up well in the photos. Later, these will be exchanged for smaller sized to fit the pulleys) black chain or rope.

There are four devices on the sides (two per side) to stabilize the car. They are pieces of tie, connected to some kind of pin that would be screwed down until the tie makes contact with the ground or other ties. There are also four devices to hold the car in place. They look rather like large pliers and operate much the same way. They would be connected to the rail, then the bolt holding them to the car would be tightened. Mine are slightly oversized. Get your magnifying lenses and make yours smaller. These devices would all be carried in a separate tool car.

The drawing (Figure 1) shows the methods of construction without being drawn to scale. If you look closely at the photos, you will find that, in the drawings, some ends are not curved or shaped as you find them on the model. They're shaped that way on the original drawings. The actual model is made with only a few basic brass shapes, I-beams, brass bars, brass rod, brass tubing, and brass washers. Most bolts are 2-56, 1-72 or 0-80, although other sizes can be used. Measurements in the drawings are meant to be a starting point only, as many dimensions will be determined by the size of the pulleys you use and the size of the brass tubing chosen. No measurements are absolutely vital. A bit of ingenuity will be required to build a similar model, but it can be done without a lot of difficulty.

To start this model, you will need at least nine items, if you install one under the car pulleys, plus the fancy one from which hangs the hook. Mine are 1/4" diameter by 1/16" thick. These pulleys are available at hobby shops that specialize in sailing vessels. You can also get the "rope" there, sized to fit the pulleys.

The next items that you will need are various sizes of brass washers. The sizes are determined by the size of your pillar. Look closely at the photos and you will see that the central pillar sits on a large (1-3/8") washer. There is a smaller washer on top of the larger one, sized to fit exactly into the base of the outer pillar. This arrangement provides stability to the pillar as it turns. The real crane would have a large gear in this position, to provide the slewing motion. Two brass tubes are soldered together to make the bulk of the pillar. Then, another washer is set on top of them to provide a base for the top of the outer pillar, upon which it will rest and turn. A final bit of tubing is then assembled on top upon which the outer pillar will swivel. The outer pillar's base is made up of two washers, one to match the bottom of the central pillar and the other to just fit over the second washer of the central pillar. The use of washers provides a ready-made hole through the center of the pillar for the large rope of the secondary hook.

Make the boom arm from two sections of I-beam (I used 5/32" x 3/32"), first putting a nice S-curve in one end (best...
made by bending both pieces at one time. File a flat on both sides of each piece, then test-fit and adjust the curve accordingly so that the inner distance between the two is 12/16". File a flat on both sides of the other ends of both pieces to fit the four small brass bars 7/16" long x 3/16" wide x 1/16" thick. They should be attached together over about one half of their length. Make the boom pulley pieces out of the same bars, but cut them to a length that will accommodate your chosen pulleys. Make one more bar to a length of 15/16", as a cross-piece, and solder all these pieces together. Make sure that you will have proper clearance for the pulleys. Drill the required holes. I used 2-56 screws on the boom pivot ends, tapping one side. The pulleys will determine their required size. Shape the bars for proper operation, and the boom is ready for the drums.

You will need two drums, the difference between them being the length which is determined by the amount of clearance necessary for proper movement of the crank arm, which is determined by the size of the gears. The close-up of that assembly will show you the relationship that you need to establish. I used gears with 48, 36, and 18 teeth with a 3/32" bore and 3/32" thickness. The only absolute requirement is that they all work together. At the other end of the drum is, of course, another washer. I used a 3/8" diameter brass tube for the drums, and some 3/32" brass rod. Form brass bearings out of tubing which just fit on the rod that you chose. The length of the bearings needs to just fit over the I-beam, on one side, and hold the different length drums in place. Lightly tin these bearings. This will make them easier to solder to the boom, and less likely that you will lack solder into them.

Fashion the crank arm out of 3/32" brass rod and some tubing that slip-its over the rod. Be careful that you leave just enough spacing so that the crank arm can slide back and forth to engage the gears fully. The crank handles are brass bars, 1/8" x 1/2" x 1/32", with 1/16" handles. You should lightly tin the bearings and solder the crank arm in place on the boom. I positioned mine at 1-3/8" from the boom pivot. Now you can solder the drums in place easily, holding them at just the right distance so the gears can properly engage.

The central pillar is formed as described above, just making sure that it all goes together straight up and down. The first piece to make for the outer pillar is the upper tubing (sized to slip-it over the upper tube on the central pillar) which needs four pieces added to attach the long rods. These are made of 1/16" thickness brass bar stock, about 3/16" square except for one that needs to be 1/2" long to provide an attachment point for the pulley arms. You may find it easier to drill these before attaching them. Don't worry about the solder forming a fillet. These were all long iron sand-castings, and they would naturally have that sort of shape. Now, add the shape to hold the upper pulley to the tube. I made this out of two pieces of 1/16" brass bar, fashioned to give me proper access to the pulley. Now make four long rods of 1/16" diameter and four U-shaped pieces out of 1/8" x 1/32" brass bar long enough to properly fit over the attaching points you just soldered to the upper tube. Drill to accommodate the screws you've chosen. Make the bottom of the outer pillar out of two washers, and ensure that it will properly seat over the washer on the central pillar. Drill four equidistant holes to hold the four rods, attach the four rods to the upper tube, and solder the rods to the bottom assembly while you hold the top tube at the proper distance. This can be accomplished by mounting the assembly in place with a layer of wax paper under the outer pillar bottom assembly and using CA glue to connect the rods to that bottom layer. Then solder the rods in place. Make sure you do this step in a well ventilated room or paint booth, because the heat will vaporize the CA. The vapor is very irritating to the eyes and nose. Now solder the boom pivot points in place using 1/16" brass bar pieces. Make these long enough so that the boom can swivel easily up and down. Rounding the top will keep from impeding this motion. Test the fit of the central and outer pillars. The outer pillar should rotate easily about the central pillar with little play. You can add some gears and a handle, as I did, on the back for looks.

The flatcar is a simple boxy affair with heavy side-framing and a deck made from scribed wood. I used 1/16" wood with 1/8" scribings. The upper deck is made from the same thickness, but slightly smaller scribings just to provide some contrast. This deck needs a hole in the middle so that the central pillar can be mounted to the flatcar decking. Be sure to provide a hole in the flatcar decking for the upper hook rope to pass through. Simple wooden shapes will provide the necessary bolsters to mount the trucks and the couplers. Make these according to the trucks you choose. Drill a hole in the brakewheel end for the upper hook rope to pass through and make some simple shapes to wrap that rope around. A simple brakewheel and some heavy nut-bolt-washer castings complete the detailing. Paint and detail the flatcar. Make the stabilizing side-pieces from a small square of bar stock, a loop of small rod, and a length of 1/16" tubing, by crimping the end and drilling a hole. The tie pieces use a long 0-80 screw that will just fit into the tubing. I left this as a slip-fit so that I could easily position the pieces for photography. Mount these at the center of the trucks so that they will not interfere with truck rotation.

The pulley arms are made all at one time, by soldering just the ends of some 0-80 rod stock together. Drill both holes, file the arms to shape, and cut off the soldered ends. Refer to the photos for proper mounting of the pulleys. There is one pulley mounted to the upper portion of the outer pillar by itself. Use some small rod (0.032") to fashion hangers for this pulley. Mount two pulley arms and this single pulley to the outer pillar. Mount two pulleys in-between the arms at the opposite end. Mount the other two arms to the same spot of the boom where the inside pulley is mounted. Mount two pulleys between the arms at the opposite end. Mount the end pulley to the boom. Using either chain or "rope", thread the pulley assemblies as shown in the photos and you will have an operating crane. Mount the inner pillar to the floor of the flatcar. Slide the outer pillar down over it. Make two hooks mine are too large from some heavy rod, and you're done.

The drawings for this crane car show some chain fastened through a loop on the boom and down to the flatcar to hold the boom in place. Instead, I chose to make a boom car from
an old "Dollar Model Project" from Model Railroad (October 1968), titled "A Rail and Tie Car", by Jack Work. This is the car Tom Houle built in OTR #32. See "A Tale of Two Rail and Tie Cars, Part One" ed. I added a heavy timber construction to one end to hold the boom while traveling.
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Layaway Available
With the decline in the number of factory available TMCC engines in the 2-Rail marketplace, and the increase of new-production DCC locomotives, I was among many O Scale modelers caught in a dilemma of deciding whether to stay with TMCC or convert to DCC. I chose to convert, looking for a better control system as well as correct sound for my model locomotives.

Don't panic at the sight of the electronics and wiring. It's really pretty simple. Cut all of the wire ties and stretch out the wiring. Remove the front and rear LED class-light boards, sound volume control, battery clip, and the power board from the heat sink. Remove the screws and the heat sink. Remove the cab battery-boxes to access the five control switches. Work from the top is complete for now; turn the frame over to work from the underside.

Remove the pilots by first prying off the handrails. On the front pilot, remove the plow. On both pilots, remove the two screws holding each pilot to the deck. You will have to cut the two black wires to the couplers, front and rear, unplug the coupler harness from the TMCC unit, and snake the harness out of the frame. Remove the four screws holding the fuel tank, separate it from the frame, and cut the two speaker wires. Remove the five slide switches located under the cab area. Remove the four screws that hold the TMCC board to the frame; two are located under the fuel tank and the rear two are accessible through the rear truck. With the TMCC board loose, you will need to work from the topside and remove the two slide switches located under the TMCC board.

I sold one O Scale TMCC engine and discovered that replacing the fleet with DCC engines would be a financial disaster. Instead, I decided to convert the remaining fleet to DCC myself. This article covers the conversion of a factory Atlas-O TMCC 2-Rail GP35 to DCC, with sound being installed later. This conversion consists of the removal of the TMCC electronics and remote controlled couplers. I left the factory speaker in place for possible use with a sound system. Installation of a DCC decoder, Kadee 805 couplers, LED lighting, and some detail work, covers the extent of this conversion.

Start by removing the body shell using the factory instructions. In this case take out the four screws under the front truck and two under the rear truck, pry out the handrails from the engine cab and lift the body shell up and off of the frame.

To remove the TMCC electronics, you need to cut the red and black pick-up wires from each truck and the blue and yellow wires from each motor. Leave enough wire attached to the trucks and motors to make splice connections later. The TMCC board and wiring can now be removed. On each pilot, remove the cover plate to access the coupler and spring. Remove the spring and maneuver the coupler in order to remove the two screws holding the coupler box to the pilot. With the coupler boxes removed, demolition is complete. Pack away these parts, as well as screws used for the TMCC electronics, for possible sale.

To start the rebuild process, first connect the front and rear truck pick-up and motor wires together with a splice wire, red-to-red, black-to-black, etc. I inserted a jumper to the
front connection of each wire for the decoder connection. Temporarily connect the power pickup wires to the motor leads and test the engine on DC current. If the engine runs backwards to other DC engines, simply reverse the pickup wires, and re-test. (Here is where you also might consider re-hooking the motors up in series, rather than in parallel, to get an improved low speed performance, reduced top speed, and a more usable control range. -ed) You could, at this point, add a 12 volt lighting system and Kadee couplers to have a conventional DC engine, or you can continue to the DCC conversion.

I used a NCE D408SR decoder (rated at 4 amps continuous load/10 amps peak load). Connect the decoder's four-wire supply harness by hooking up decoder red to truck black (engineer's side), decoder black to truck red (conductor's side), decoder gray to blue motor lead and decoder orange to yellow motor lead. Since this decoder also operates in analog mode, connect the decoder and test on conventional DC and on DCC power following the installation directions.

To install Kadee #805 couplers and boxes, you'll need to trim the coupler to the correct height. I did this step by laminating a pair of one-inch pieces of Evergreen strip styrene (#179) together to form a box 1/2" x 1" x 0.100" tall. File and sand one end of the box to a 30-degree angle, to repre-
you're ready to operate the engine for evaluation and performance programming.

Decoder installation is simple, following the manufacturer's recommendations. Work carefully in the removal of the TMCC electronics to salvage these parts intact. Solder and protect each new electrical connection with heat-shrink tubing. Take your time and learn from the experience.

The last photo shows EMD 5652, back in manifest service on a late evening run. Future upgrades will convert this engine from a '60s-era factory demonstrator to a modern day lease unit, but that's another article. For now, have fun.

Parts List
- NCE D408SR Decoder
- NCE 524018 Golden White LEDs
- Radio Shack 1k-Ohm 1/2-watt Resistors (271-1118)
- 1/16, 1/8, 3/16" Heat-shrink Tubing

Tools List
- Soldering Gun
- 15-watt Soldering Iron
- Wire Cutters & Strippers
- Hemostats (Heat Sink)
- Hobby Screwdrivers

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NEWS: Golden Gate Depot Project Update; MSRP: see below Golden Gate Depot, 231 Market Place, Ste 225, San Ramon CA 94583
www.goldengatedepot.com
Pullman 12-1 Sleepers are in production and should have arrived by the time you read this. Some roads are sold out.
MSRP: $129.95
Head-end sets are coming in December. MSRP: $379.95
Coaling Tower: Production is scheduled for August and a September arrival. MSRP: $199.95
Aluminum Cars: The NYC and SF aluminum cars are set for a November delivery. MSRP: $589.95
SF Daylight Set. Price has not been determined. The Daylight set will include 5 single cars (chair-combine, chair, trolley, parlor, and parlor-observation). There will be a five-car articulated add-on set, with a dual chair car, and a triple-articulated diner. Each set will have a full and accurate interior, correct fluting, trucks and generic underbody detail.
RFA 3’4” welded reector in plastic, with a heavy metal base and diecast trucks. See the website for color options. MSRP: $589.95 each.
Diner and Observation: GC is working on designs of an 83’ diner and 85’ Pullman observation car. Same roads available as the coaches and head-end sets. Two-car add-on.
MSRP: $279.95
Little People: These are in stock now. Come and get ‘em. You can buy these by paying us via PayPal to Sales@goldengatedepot.com, or mail your order form with a check. We would be glad to ship your order out immediately. MSRP: $19.95

NEWS: Plymouth Industrial Diesel in On30 and On30; MSRP:$209
AMS, a division of Accucraft Company, 33268 Central Ave, Union City, CA 94587
510-324-3399 • www.accucraft.com
The Plymouth Industrial Diesel from AMS is hand-crafted in brass and stainless steel with working headlights. It operates on 0-12v DC, and runs on minimum radius of 6 inches. It will be available in On3 and On30 at a retail price of $209 with delivery in the winter of 2007-2008.

NEWS: LEDs, MSRP: $.50 ea., 5 for $20
Evan Designs, PO Box 2044, Broomfield CO 80023
www.ModelTrainSoftware.com/LED.html • info@modeltrainsoftware.com
Evan Designs is pleased to announce an all new line of LED lighting products specifically developed for model railroad enthusiasts. These super bright, low heat, durable 100,000 hour LEDs are a great choice for locomotive headlights, passenger car lighting, ditch lights, signal lights, warning lights, and many other railroad lighting needs. Each light is fully guaranteed against any failure for two full years of use with free replacement.
The new LED lights come completely pre-assembled with six inches of connector wire and with components selected for track conditions. Each individual LED light has super compact electronic components including a full-wave bridge rectifier for "always on" forward and reverse operation, and a metal film dropping resistor to enable the lights to stay brightly lit from seven volts right up to 19 volts of AC, DC, or DCC power. The LED lights remain visible right down to five volts of power input. There is no work needed by the customer to prepare these lights for use with trains. The lights truly are "plug and play".
The LED lights are available in 1.8mm, 3mm (T-1), and 5mm (T-1 3/4) diameters. Available colors include a warm white that closely matches an incandescent light bulb, and is suitable for steam locomotives and interior lighting. Other LED colors available are: cool white, red, yellow, green, blue, and orange. Integrated circuit flashing LEDs are available in flashing white, red, yellow, blue and green.

To help introduce this new line of high quality lights to O Scale Trains Magazine's readers, Evan Designs is making 250 of the fully assembled warm white 5mm (T-1 3/4) LEDs available for free, waiving all shipping and handling charges. Interested readers should mail a self-addressed envelope and a mention of "O Scale Trains Magazine LED Giveaway" to Evan Designs to receive their free light. Lights will be distributed on a first-come, first-served, basis. One per customer please.

Single Lights retail for $4.50 each. Packages of 5 lights are $20. Large volume discounts are available. and dealer inquiries are welcome.
NEWS: Mt. Albert Brewery Kit, MSRP: $200
Mt. Albert Scale Models, 18647 Centre Road, Mt. Albert, ON, L0G 1M0, CANADA
905-473-3161 • www.mtaltet.com

Mt. Albert Scale Models, a subsidiary of Mt. Albert Scale Lumber, has announced the second in a series of limited edition craftsman kits in O Scale. The kit is the Mt. Albert Brewery. A similar model was produced in HO Scale many years ago, by Campbell Scale Models, under the name "Brett's Brewery". The new kit was designed by Roger Malinowski, well-known and respected for his line of craftsman kits under the name Stone Creek Designs. Roger also provided the stone wall masters and laser-cutting services for the new kit.

The Mt. Albert Brewery features laser-cut sheetwood and plywood, board-by-board construction, cast-resin detail parts from Schomberg Scale Models, scale real wood shingles, wall castings from hand-cut originals, and full-size architectural drawings. The footprint is 9" x 12". The kit also features an unusual cooperative venture between Mt. Albert Scale Models and Bachmann Industries. The colorful signs provided with the brewery kit match the On30 billboard reefer cars available from Bachmann.

All the basswood is from Mt. Albert Scale Models, the industry leader in precision basswood stripwood and sheets. This kit is a limited run of 150 numbered models. The MSRP is $200.00 (US), available only direct from the manufacturer.

REVIEW: Acme Machine Co., Kit #442; MSRP: $29.95
OGR Publishing, 33 Sheridan Rd., Poland OH 44514
800-980-6477 • www.ogaugerr.com

Reviewed by Joe Giannovario

I decided I need a small industrial center on the Coal Creek Railway. The layout isn't designed with a lot of siding and switches but, after seeing Brian Scace's CTRRA (see the feature article in this issue), I was moved to add some "doors" where freight cars could be spotted for increased operations. (The development of this industrial center is covered in more detail on the OGR blog under the category "Joe's Projects").

Two of the buildings in the industrial center are from the AmeriTowne series, produced by OGR Publishing. One, the Acme Machine Co., is a complete kit. The other, a tenement, was made using several AmeriTowne walls that can be purchased separately.

The Acme kit is made up of four wall-units, two of them identical sides, a "front" and a "back" wall, plus a roof and a few details. I didn't much care for the design of the "front" wall, so I made sure the "back" wall faced trackside. These walls are very well-made injection moldings of brick walls, with cast-in windows, people-doors, and height-sized doors. The details are clean, although a bit oversized. When built, however, these buildings are quite rugged. Clear plastic sheet is provided as window material. The details include a small water tank for the roof, a pair of air vents, and a pair of wooden freight platforms.

This kit has probably been around a while, and there was flash that needed to be removed from the window openings. The three-story walls I used to make the tenement had almost no flash at all. With plastic kits, as with resin kits, it is a good idea to wash everything in a good degreasing detergent to remove any mold release compounds from the castings. Next I filled in the grout lines by rubbing grey acrylic paint all over the surfaces of each wall, and then wiping it off with a cloth. This leaves the paint in the grout lines.

While that was drying, I painted all the window frames and doors with Floquil solvent-based paint in Roof Brown. The solvent-based paint flows better over the plastic and allowed me to get into the finer details without stopping the brown all over the bricks. I set all four walls aside to dry overnight.

For final assembly, I sanded each end so there would be fresh styrene with no paint residue. I set two sides at 90 degrees, checked that with a small machinist's square, and flowed styrene cement down the joint. When that had set up, I rotated the building 90 degrees and put the third wall in place with styrene cement. Do likewise for the fourth wall, all the time checking to make sure all the walls were square. The roof just drops into place and was cemented from underneath.

When adding the window material to the backs of the walls, cut the clear sheet into rectangles slightly larger than the window or door opening and glue them in place. I did this with the tenement and it worked out very well.

Basically the building is done except for details. The vents are cast metal and need to be secured with CA. The water tank is made in three parts, all representing metal. I decided I wanted a wooden tank and wrapped the tank body with 0.020" Evergreen styrene siding. The freight platform on the "track" side had a set of steps added that were meant for the "front" wall and I also added part of a Grandt Line handrail. I also added a resin air conditioner and ductwork to the roof, for some additional detailing.

This is a great building kit for less than $30. You can buy multiple kits and combine them into even larger buildings. OGR has done just that, and released a larger factory, Barrettsburg Tool and Die (Kit #941, MSRP $99.95). It measures 12" x 18". You can also buy individual walls and make your own structures, as I did for my tenement building. You're limited only by your imagination.
REVIEW: GE Dash 8-40B (2-Rail Gold) MSRP: $439.95
AtlasO LLC 378 Florence Ave, Hillside, NJ 07205
908-687-0880 • www.atlaso.com

Reviewed by Brian Scace

As the Gold Line from Atlas expands, we’re seeing more modern power come into play. Here we have an example of the General Electric Dash 8-40B, painted, lettered, and detailed for Conrail. Although on two-axle trucks, these are pretty big units, almost the size of an SD-40. The model itself is not a new one, having seen a run or two in straight DC and in TMCC 2-Rail. This is the first run of these units done with the new QSI DCC system factory-installed, however. As in previous runs, the basic dimensions are where they should be, and the fit, finish, and detailing are as we have come to expect from Atlas. Everything applicable checked out with the on-hand NMRA and Kadee gauges.

DC Cab Control

Atlas and QSI cells conventional cab control “analog” in their instructions. I used a ControlMaster 20 to run this sequence. This unit behaved much like the SD-40s tested in the last issue: about half of the speed control is dedicated to supplying enough voltage to light the lights and start the sound. Manipulation of the reversing switch on your power supply triggers the bell (latched) or the horn (momentary) depending on the duration of the reversal in polarity. You have to turn the power off (hence the sounds) all the way off to change direction. There are several programming sequences you can do in analog mode, using the supplied magnetic wand and the book. The forward direction is dictated by track polarity, as you would expect. You’ll have to decide for yourself if you can live with having to hear the restart sequence every time you want to change direction, and the fact that half the throttle range is required to get it moving in regular DC operation.

DCC, Cab Control, and the Black Box

In DCC mode, the first thing I did was change the address to the cab number and turn down the volume. The volume was set from the factory at maximum; I reset it down to about 20% and the unit still sang out nice and clear, with a very nice horn and bell. The fun comes with mixing the GE sounds with those coming from, say, an SD-40. They sound so different, one a two-cycle and one a four-cycle, both with turbo whistling away. This is an effect I just couldn’t get with the limited sound library available with TMCC 2-Rail, I did a simple consisting exercise and ran them around for a while. The system performed in a predictable, reliable manner with no real expertise on my part. For you guys whose hobby is control systems, a reference book is supplied so you can get access to all the variables and turn ‘em the way you want. For the rest of us who just want to plunk ‘em down and light ‘em off, the two operated in multiple very nicely using basic DCC operation and the basic DCC function keys, right out of the box.

Using MRC’s “black box”, the GE operated as one would expect, with a full range of functions accessible using the function keys and a full control range. The MRC unit, for those who didn’t catch the SD-40 review, is an add-on controller for DC railroads. It permits operation of dual-mode decoders, such as QSI, without going to a full DCC system. Our GE operated smoothly in concert with a couple SD-40s in our test with the “black box”. Remember that “forward” is “locomotive forward” using these systems, so you’ll have to get a friend with DCC to set the default forward CV for you if you want to run units back-to-back in a locomotive consist.

The lighting is, shall we say, potent. Blue-white LED’s are used for the headlights and the ditch lights, rather than the yellow-white LED’s used in Atlas’ SD-40. The ditch lights oscillate when the horn is blown, as they should, for about five seconds.

All in all, a nice addition to the modern arsenal, and a nice new element in the sound mix. The sounds (such as the unique pop-off of the air tanks inherent in the recent products from Erie, the compressor, and the prime-mover are nicely “modern GE”. The horn and bell are quite convincing, as is the selectable dynamic brake. Mixed with an EMD, the differences are enjoyably striking.
Review: Prodigy Advance Wireless; MSRP: see below
Model Rectifier Corp., 80 Newfield Avenue, Edison, NJ
08837-3817 • 732-225-2100 • www.modelrectifier.com

Reviewed by Brian Scace

Model Rectifier Corporation has announced the release of the latest in their expanding line of Digital Command Control (DCC) systems, Prodigy Advance Wireless. It is what the name implies. You get a handset that looks and acts, a lot like the Prodigy Advanced handheld, but is also a radio-control transmitter. The receiver is a little shrink-wrapped thing on the end of a six-inch cord that plugs into the base unit of your Prodigy system (Express, Advanced, or Advanced Squared) or those sockets you spread around your railroad's fascia. This takes the place of the tether and the original handheld. Installation takes about two minutes. Once you give the transmitter a cab address, you're ready to go.

The keypad will be very familiar to those of you already using Prodigy Advanced. There are two buttons that are new. First is a "battery status" button that tells you how much voltage remains in the rechargeable NiMH AAA batteries that come with the handset. The second new button is a "Program CV on Main" feature. Punch this guy and you can change CV’s values on the Fly without using a program track. It changes CV’s only on the locomotive you have addressed, great for turning down the volume on your sound equipped Diesel.

Battery charging is handled by plugging the handset into the fascia sockets on the base unit in the same manner as the tethered handset that came with you original Prodigy Advance system. The handset will recharge from dead-flat to full-charge in something like five hours with the switch off. You can also leave the switch on and continue to use the handset as a tethered throttle while recharging, if you find yourself in a bind. A set of AAA alkaline batteries will work, as well. I'll probably pick up another set of NiMH batteries and a Wall charger (from someone like Staples) just to have them on hand, but I didn't come close to running the batteries down in an afternoon of playing with this thing.

Prodigy Advance Wireless is capable of programming and acquiring locomotives without having to actually jock into the rest of the system, which is a nice feature that my previous DCC "wireless" system didn't have. The transmitter has a built-in capability of delivering all 28 NMRA functions, upgrade-able to 100 functions. I had no issues intermingling the wireless system in with my mixture of Prodigy Advanced and Prodigy Express tethered handsets.

After an afternoon of fun and frolic with this new toy, I cast about for a novel way of testing out such things as range and signal robustness. Not being able to resist the temptation, I broke out one of those little on-board video cameras that I had mounted on a flatcar and put it in front of the Atlas Dash-8 I was testing out for another review, and cleared the main. Upstairs we went to the family TV set, plugged in the video receiver, and put a short of Turkey Nip, sat down in my easy chair, and went for a video/radio-controlled tour of the railroad from the comfort of the living room. We don't need no stinking TrainSimulator. All the signals I sent from the coach, such as horn, bell, forward and reverse, ran flawlessly from the chairborne command post. Feeling frisky, I went up in the bedroom and reset a CV (the volume) from the second floor. These highly scientific tests lead me to believe that there shouldn't be any issues with range or signal robustness in my world. Other than that, the test was pretty useless, other than having a lot of fun at it. Back in the real world (the cellar), the wireless was quite pleasant to use on the railroad in an "up-close-and-personal" way, walking with the switches instead of having to put the handheld down and hiking about to un-couple cars. Now, if they'd just put a button on the base that I can push and a beeper would go off on the handset, I might be able to find where I put the fool thing down last.

Remember, it ain't wired in anymore.

Prodigy Advance Wireless is available as a stand-alone wireless system for new DCC customers, or as an add-on conversion set enabling Prodigy Express, Prodigy Advance, and Prodigy Advance 2 owners to go wireless.
Prodigy Advance Wireless (Complete Set) #0001410 - $399.98 (MSRP)
Prodigy Advance Wireless Walkaround #0001411 - $189.98 (MSRP)
Prodigy Wireless Conversion Set #0001412 - $289.98 (MSRP)

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Sept/Oct '07 - O Scale Trains • 55
You'll have to make a decision or two. With steam, this isn't that big an issue, because we usually run just one at a time. With Diesels, I want to run several units at once. Try as I might, I couldn't find any way, even in conventional cab-control, of running a mixed locomotive consist with anything but other MTH power.

Overall, this is a well-built model. A strong plus is the fit and finish. It operated well through its speed ranges. Like many of the paired vertical-motor drives I've tested, the starting speed is a bit high, as was the lowest sustained speed I could achieve. The wheels all checked out with an NMRA gauge. My Kadee gauge came in with the coupler pads a bit high, which actually is a good thing if you want to try any of the suggestions below regarding nesting the engine down on the trucks where it belongs. Otherwise, a couple shims (either home-made or those from Micromark) will get them down where they need to be.

Scase's Notes for the Neurotic

There are several things about this model that you can noodle up, depending on your desire for fidelity and your modeling skills. Let's look at the trucks, as here we'll find the most room for quick improvement. These units are long lanky things and, although a lot of that illusion is lost in the model out-of-the-box, it is fortunately easily recovered. I got a little lucky, here, because I had an opportunity to take a tape measure to a 12" to the foot SD70, and here's what I found.

MTH's frame is actually pretty close in depth, but the whole unit sits too high off the trucks by about 8'. A few judicious swipes with a file on the nubs between the trucks and frame will do much to improve this situation. Couple it up with a different trustworthy unit, and get 'er done so that your O Scale enginemen don't have to jump off the endwalks to get from unit to unit, and you'll do much to improve the overall appearance of this model.

Harder to deal with is the width of the trucks. Taking into account that we're running on 3" gauge, the trucks are still over-wide by about a foot on either side, most apparent when you see the relationship between the truck width and fuel tank width. The ambitious among us may want to tackle
thinner than the inboard vertical (which is a thick welded structural member). Nothing a big flat file can handle, but you'll have some re-dating to do when you're done. While you're at it, you might want to go after the airway at the extreme rear of the unit. Screen would have made a better representation of the "see-through" look of the prototype.

The horn is oversized. Get a casting of appropriate dimensions, and move the mount to the right location while you're at it. The A/C unit and GPS dome are a bit high, too. Since you're on the roof, carry the gray/yellow division around the ends of the radiator assembly. I don't know if anyone makes good aftermarket stanchions for the handrails on modern EMDs, but the ones on the model are pretty heavy.

A good reference can be found on the web at [www.ripicsarchive.net](http://www.ripicsarchive.net). There are quite a few photos here of this particular unit (UP 8321), including a nice set of as-built detail shots by Joe Zia.

For the less ambitious, lowering the unit, changing the horn, and darkening the trucks a bit will go a long way toward bringing this model's visual fidelity up to speed.

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**Book Review: Norfolk & Western ...Steam's Last Stand**

4204 Russell Rd. Unit P, Mukilteo WA 98275
800-810-7669 • www.hundman.com

Reviewed by Joe Giancavalo

Like a chocoholic, an N&W fan can never get enough photographs of the N&W in steam. So, I was very pleased to hear that Hundman Publishing and Mallory Hope Ferrell were planning a new N&W book. Now that the book is here, I can say my expectations were exceeded.

Ferrell is a prolific rail author, having produced some 19 books at this point. My only previous exposure was his book, *The Silver San Juan* about the Rio Grande Southern. This led me to believe, erroneously, that Ferrell was a narrow-gauge only writer. It turns out that Ferrell grew up along the N&W and has been a fan of the road since his younger days. That serves the rest of us N&W fans very well, as he and his friends have collected some of the very best photos of the N&W in steam.

The range of photos is eclectic and shows virtually every class of steam that ran in the 20th century. There was some very interesting juxtaposition of photos. In Chapter 1, there is a set of black-and-white photos of M-class 4-8-0s from 1910 and, in the epilogue, are color photos of M-class 475 at Strasburg, circa 2005. Way cool!

Overall, the book is 320 pages long and the reproduction quality of the photographs is stunning. Every photo, regardless of age, is crisp and clear. The photos came from the collections of the author, August Thiemer, Jim Shaugnessy, Bruce Meyer, and several others. Throughout the book, there are also sketches and illustrations from Jim Scancarella (who draws the Gasoline Alley comic strip), Mike Kozowski who does the artwork for the Key Imports ads, Casey Holzinger, and Jim Young. Another feature not usually included in a photo book of this nature are five sets of plans. Featured are the Class A 2–6–6–4, Class Y3 2–8–8–2, Class J 4–8–4, Class S1 0–8–0, and Class S1a 0–8–0.

Aside from the photo quality, Hundman Publishing did an outstanding job designing this book. Everything about it is first class. They should be quite proud of this volume. It is an excellent addition to my N&W library. I am so impressed by the book that I am buying two other Ferrell works published by Hundman, *Steam Trains Down South Volumes 1 and 2.*
Review: Scenery Materials; MSRP: varies
Timberline Scenery Co., PO Box 57, Platteville CO 80651
800-326-0321 [www.timberlinescenery.com]

Reviewed by Joe and Jami Giannovario

We received a press release from Timberline Scenery Co., touting their line of coniferous and deciduous trees. What sets Timberline's trees apart from others we've seen are the real wood trunks. These trees look very realistic.

The trees are not sold by type, as with most other tree products, but by color. Pick the color you want and the price is determined by the height. Six conifers, ranging from 1/2" to 2" tall, will cost you $7.98. A single 24' tree will cost you about $30. Prices are a bit less for the deciduous trees, but they are also shorter in height. There are 13 coniferous colors and 13 deciduous colors.

However, the product we really like the best was the "Forest Floor" ground cover. This is ground foam, but with real twigs and stumps added. A 60 cu. in. bag about a quart is $8.98. Again, you pick the color you want (four selections), and then the quantity determines the price. Timberline also sells plain ground cover in 20 colors, each in three different grades from fine to coarse.

REVIEW: 40' Steel Flat Car, MSRP $44.95
Weaver Models, 315 Point Township Drive, PO Box 231, Northumberland, PA 17857
570-473-9434 • www.weavermodels.com

Reviewed by Brian O'Sce

One of the most ignored steam-era cars in O Scale has been the lowly flat car. There have been options, to be sure, including the Berkshire Valley straight-side forty-footer, the exquisite Red Caboose kit, and the venerable 50' Lobaugh and Frederick kits. For the ready-to-run crowd, though, not much out there until now.

Weaver has added a nice plain-oil 40' steel flat to their line of domestic-made (that's USA-made) ready-to-run freight equipment. Our sample came with die-cast metal trucks, metal wheels, and couplers. The proportions are nice, fit and finish are both quite good, and the graphics are neat and clear. The relationships between the various assemblies (truck/underframe, deck-height, and the like) are quite pleasing, out of the box. All the important stuff checked out with our ever-present NMRA and Kadee gages.

The car is nicely weighted, out of the box, and behaved well at the head of a fifteen car freight without any tendencies to the anti-social behavior one would fear from an empty flat leading heavy brass rolling stock.

There are all kinds of possibilities here. The body is a one-piece casting, and the stake pockets to be a little thick, a manufacturing necessity, but not as objectionably so as could be feared with a one-piece molding. A quick treatment of the deck (see this issue's "Easements" column) and some judicious weathering will make the car stand out. Of course, flat cars lend themselves to all sorts of possibilities under the knife.

Weaver is also offering some neatly cut and assembled laser-cut wood loads for these cars. For $14.95, you get a couple crates made from laser-cut wood. Joe Hayter says that there will be several varieties of loads available as time permits, and was receptive to the idea of offering the crates (shown in the photo) without lettering for those of us who want more nondescript loads.

Here's a nice model of a plain-jane car, worth checking out.
Train Sets?

Back during the spring, we received a newsletter from AtlasO announcing train sets. Now, train sets aren't usually what many of us, myself included, would consider as particularly germane to the Craftsman's Scale. Once I started thinking about it though, perhaps it's high time they were. O Scale is becoming more accessible to many, what with the plethora of decent ready-to-run stuff in the marketplace today. Although this might produce a lot of wailing and gnashing of teeth among many of us who used to revel in the idea that one had to earn their spurs to be an O Scaler, the facts are pretty clear that our world is changing. Many of us think it's for the better, while some think it's the end (we've always been a pretty passionate bunch.) For the moment, let's just admit the debate exists; I'm not pursuing it further here. However, for the teeth-grasbers who haven't worn their choppers down to the gums yet, now there are O Scale train sets. That's O Scale 2-Rail train sets, kids. I remember a couple industry forums ago, when the debate from the floor was pretty heated on the subject. Back then, I wasn't convinced one way or the other. I'm not sure that I am, now. However, they're here in the flesh (plastic, whatever), so the question now becomes: "What do we do with them?"

Well, we do with 'em what people in the smaller scales do; get folks interested in our world. Let them learn by experience that 2-Rail O is just as easy to work with as HO. Let folks learn for themselves that O Scale doesn't solely mean Lionel, three rails, trains that go twice the speed of sound, and/or "cab-chatter". It also doesn't mean machine shops, forges, second-mortgages, and a warehouse to turn a loop. As long as that beginners' set is of good quality, we have a powerful tool to get the neophytes started down the path to the one and true faith without intimidating the be-gibbers out of 'em. I'm going to review one of Atlas' sets as soon as I can get my lunch-books in one, then try my boy out with it just to see what happens. I'll let you know how it works out over time. After all, they have to get in the saddle before they can earn their spurs, and its up to us to introduce them to the right horse. If we don't do it, there'll always be the tweezer-train guy or the toy-train folks right behind us.

Quickie Flatcar Deck Improvement

What with the addition of some new plastic ready-to-run flatcars from Weaver and Atlas to the few choices we've had previously, here's a real quick way to improve those shiny decks. This works fine on any of the plastic cars. I'm using a Weaver one for the example shown, painted brass ones, and even the good ol' 'Frederick and Lebough kits. Get a decent 1/2" brush, some Floquil Concrete, and some Floquil Engine Black. Slather on a coat of Concrete. Don't be too concerned about being that careful. In reality, a generous and liberal slopping-on is called for. Cover the whole deck. While the grey is still wet, dip the brush in the black and start loading it on, too. Sweep from side-to-side not lengthwise, drawing the streaks all the way across the deck. Don't stop in the middle. The more black you add, the darker the streaking. Do the entire deck this way, then walk away convinced that the car looks ruined. Floquil dries thin enough so that, when you summon the courage to return to the scene of destruction, the deck will look like the photo. It takes about ten minutes to do, and improves the appearance dramatically. Weather the rest of the car to suit, and load 'er up.

Let's go Exploring
Von Richards is truly a "HiRailer in Transition", as these photos attest. The locomotive is a Weaver 0-6-0, converted to 2-Rail by Joe Foehrkolb. The older handlaid three-rail trackage is being re-wired to 2-Rail, with the third rail to be eventually removed. All of Von's new trackage is being laid in 2-Rail.
B&O 1447 is an All Nation 4-4-2, built as a B&O A3 4-4-2. This model won 1st Place (Steam) at the Stamford SONC in 1989, and 1st Place (Steam) at the NMRA Northeastern Regional Meet in 1999.

What is the point of these models? They are all kits that are generally "looked down upon" (in Ed's words) as being too plain, too simple-looking, or just too much work to complete. Ed says he enjoys the challenge and it keeps him from accumulating an even larger pile of models than he already has.

B&O 1961 began life as a Mac Shops RDC kit and is finished as a B&O "Speed Liner" coach/dinette. Ed made the B&O herald and the "Speed Liner" plaques on a computer. The RDC uses a pair of NWSL "Magic Carpet" drives and has both directional and interior lighting.
Opposite page: CNR 6401, a semi-streamlined 4-8-2 U4a, pulls into Lilleyburg station with #75, the overnight from Toronto. The CNR has limited trackage rights over the Central Ontario Railway on the Model Railroad Club of Toronto’s layout. In the background, the southbound Petrie turn is rumbling across the through-truss bridge.
Reader Feedback

Photo Info Requested

I was totally “blown away”, as the young’uns say today, by Issue #32’s content and format and EXCELLENT photography. I am especially enamored of Warner Clark’s “Maumee Basin Line”. Had the text not called my attention to the “four-spikes-per-tie” scenario, I would have missed out on a lot about the layout. I do not recall having been aware of seeing a P48 front page spread before. This one is special. It was as if I could reach out and touch the real, but long gone, NKP by pointing around on the paper with my fingers.

I would appreciate it if you could make Mr. Clark and your staff aware of the excellence I see on my hard copy magazine. If I had a hat on, I would definitely take it off in a salute to all involved.

A question, would it be possible that your publication could somehow make us photo geeks aware of what imaging equipment they use on these articles? I am a rank amateur at it and have been trying to learn digital for the past nine years. I do not care if they use Brownie “Hawkeyes” and M2 (flash) bulb-ettes. The work in this magazine speaks for itself. “No excuses needed” is for certain. I just am curious about what they DO use. I’d bet you there are other readers that would like to know too.

R.T. Seman Sr., Ohio

Joe C. replies - Richard: Thanks for the question. The fact is, most authors don’t give us the details of what equipment they use. The current crop of digital cameras produces nearly identical results. In addition, the post-processing (i.e., what we do here before we lay out the articles) is as important as taking the initial image itself. There is virtually no photo that goes into the magazine that doesn’t get some work done on it by us. However, if enough people are interested (send us an email or drop a note) we will start asking for that info with future articles.

Hooked on O

I just received my second issue (#32) and all I can say is that I’m glad I came across your publication. Ever since the demise of Finescale Railroader, I’ve been like a fish out of water looking for another publication that I could grab on and relate to. I’m not disappointed.

I’ve been into O Scale narrow gauge (On30) ever since Bachmann introduced their line of affordable, fine running, and detailed locomotives. I’m slowly moving toward P48 standards and it’s so good to see, at last, a magazine that gives credence to the subject matter.

I’m now thoroughly hooked on O Scale. Thanks again for the magazine; keep up the good work.

Dan Hazelwood, Little Rock, Arkansas

Reverse Curves Made Easy

Reverse curves are easy to lay out if one uses laminated roadbed. I use 1” x 1” strips of wood (cut from 1x4 lumber) which, when bent to a curve, form their own easement into the curve. When used to change direction, it will add the one car length needed in the process of changing direction. I use eight strips to support the roadbed.

With regard to insulated joints, I manufacture a product called the Rail Insulator, made just for this purpose.

John Houlihan, The Irish Tracklayer, Fresno, Calif.

3-Rail Prototype

I am sending the enclosed photograph for the benefit of those readers who would get rid of 3-Rail modelers. The photo is a scene along the Metropolitan Railway, part of the London Transport system, at a time when the line was being electrified. The Metropolitan Railway was a peculiar combination of subway and mainline railroad. Imagine getting on a subway train in the middle of New York City and getting off 40-50 miles out in the suburbs, with a change from electric to steam along the way. The outer part of the line was cut back, electrified, and steam power eliminated in the 1960s.

As you can see, the electrified line is very much like model railroad track, except there is an outside power rail; the center rail is a return ground. When the London subway was electrified in the late 19th century, city officials were worried that stray current using the running rails for return ground would cause corrosion of water and gas mains. So, they mandated a separate rail down the middle of the track be installed and used for a return ground.

There is also an interesting side note. Some subway lines in London were built under American auspices, without the center rail. When the London subways were unified under London Transport, a dummy center rail was added to those lines so as not to damage center-rail pickup rollers on the equipment.

Myron Levitsky PE, New York NY

About Those Backdrops

I thought Andy Romano’s layout in the last issue (#33) had terrific detail and I was particularly interested in how he did his industrial backdrops. They seem very original and blend amazingly well with the foreground including what seems to be a hazy focus on the backdrops. I know they’re photo murals. Did Andy do them himself (now?) or are they commercially available. Thanks very much.

Jerry Zaret - via email
Andy Replies: The backdrops are made using my Macintosh photo-manipulation applications. In short, I find photos that I think will "look right" - photos of the actual area I want to model. I scan the photos, then digitally combine them (on the computer screen) to make a long, linear montage that more or less "matches" what's in the foreground scene (the actual track and structures, etc.) The colors and details get blended so they work together. This is where my art background really comes in handy as, by the time I am done it's really more art than photo! I add and subtract elements of the different photos with my computer, or correct size discrepancies and perspective if the photos don't match at first. Then I print them out on a large-format printer. The prints are mounted on sheets of foam-core, sprayed with a special fixative to make them more fade-resistant, and attached to the back of the layout in various ways. Many parts of the backdrop also have dimensional photos that are scaled and cut-out, and mounted right onto the backdrop, sticking out from the background about 1/2" to add more of an illusion of "dimension." As elements of the photos appear farther from the foreground they are "ghosted" out so they appear to fade into the lovely "jersey" haze.

Errata

In Issue 733 we made several errors in reproducing the drawings for Ted Byrne's article "More on Realistic Passenger Car Lighting". The correct diagrams are shown below. We regret the errors and thank Ed Miller for pointing them out to us.
September 2007

15: Merchantsville, New Jersey
Cherry Valley Model RR Club is hosting their Fall train meet at the Grace Church, Maple Ave & Center St, Merchantsville, NJ on Saturday, Sept. 15th from 9:00 AM to 1:00 PM. The Cherry Valley Model RR Club will be open during the meet for visitors. Admission is $5, children under 12 are free. Tables $16 for first table (1 admission), two or more tables, $12 ea. Helpers $4 ea. For more information contact CMRRC, PO Box 192, Maple Shade, NJ 08052 or email Chris Crane, p2ctcrane@verizon.net

20-22: Indianapolis, Indiana
2007 O Scale National Convention, sponsored by the Indy "O" Scale Meet and O Scale Tables Magazine. Held at the Indianapolis Marriott East, 7602 East 21St St, Indianapolis, Rooms are $59 to $79 per night with FREE parking. Three day admission is $35, Tables are $40. We will have 20,000 sq ft of selling space and nothing but O Scale trains! For more details contact Jim Carter, 317-782-3322, or email jtcarter@ptfglobal.com

October 2007

12-13: Brevard, North Carolina
Narrow Track 07 is a gathering of narrow gauge and logging modelers. Registration is $20 each, plus $10 for a spouse/significant other. Manufacturers, publishers, modelers welcome. There is also a model contest. For registration info contact: Narrow Track 07, 1094 Old Hendersonville Hwy, Ste 104, Brevard NC 28712, email: narrowtrack@mac.com

13: Gardner, Massachusetts
Southern New England Model RR Club’s O Scale train show at the United Methodist Church, 151 Chestnut St, Gardner, MA from 9:30 AM to 4:00 PM. White elephant table, sales & exhibits, operating layout, model display area, four prizes, food on site. Six ft. vendor tables $15 before Labor Day, $20 after. Setup 6:45 AM to 9:30 AM. Admission: $5, Family max. Contact: Larry Grant, 978-358-2896, gdue_existing@netzero.net

18-21: Albany, New York
NHRRA Northeast Region Convention, Hudson/Berkshire Division of Northeast Region of NHRRA is holding Fall convention in Albany, NY. Contact: inder@verizon.net.

2007 cent'd.

27: Orlando, Florida
Florida O-Scale Society Fall Meet Swap session, popular model contest. Admission: $10, children under 12 are free. Located at the Airport Holiday Inn, 750 N. Aloma Ave which is just off I-405 (Semoran Blvd) and the Beach Line Expressway (SR-528). Hotel cost is $104/night but you must inform the hotel that you are with the Florida O-Scale Society. Please ask for the FOS Code when making your reservation. Please send your event registration form to: R. W. Detweiler, 2756 Conner Circle, Orange Park, FL 32065. Contact: bgwe@gsmr.com or write to Stuart Ramsey, 23 Raintree Lane, Ormond Beach, FL 32074.

November 2007

3: Kirtland, Ohio
2-Rail train meet of the Western Reserve. Dedicated to the memory of Gil Smithwick. Two-Rail only meet no multiple H-Rail or other scales allowed. Located at the Lakeland Community College, 7710 Clocktower Dr, Kirtland OH 44042. Admission $6, under 12 free. Show hours from 9:30 AM to 2:30 PM. Six foot vendor tables are $37. Vendor entry Friday 2:00 PM and Saturday 7:00 AM. Not affiliated with the former Western Reserve O-Scale Committee. Contact: Bob Frieden, 440-256-8141. NO PASSES ACCEPTED AT THIS MEET. Note: Out-of-towners call for special room rates.

16: Harvey, Louisiana
Southeast Louisiana O Scale Model Train Show. Open 10:00 AM to 5:00 PM. Admission: $1 per person, $3 per family. O Scale (2-rail), HO Scale, N Scale, Lionel. Held at St. Marks Church, 3245 Manhattan Blvd., Harvey, LA 70058. Call for info: (504) 341-5081, jjpayne@bellsouth.net.
<table>
<thead>
<tr>
<th>Advertisers Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 O Scale Nat'l Conv.</td>
</tr>
<tr>
<td>AAA Turntables</td>
</tr>
<tr>
<td>Allegheny Scale Models</td>
</tr>
<tr>
<td>AM Hobbies</td>
</tr>
<tr>
<td>American Beauty</td>
</tr>
<tr>
<td>AMS/Accucraft</td>
</tr>
<tr>
<td>Artista</td>
</tr>
<tr>
<td>Babbitt Railway Supply Co.</td>
</tr>
<tr>
<td>Bachmann</td>
</tr>
<tr>
<td>Baldwin Forge &amp; Machine</td>
</tr>
<tr>
<td>Banta Modelworks</td>
</tr>
<tr>
<td>Brummy's Ballast</td>
</tr>
<tr>
<td>BTS</td>
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<tr>
<td>Buffalo Creek Graphics</td>
</tr>
<tr>
<td>Caboose Hobbies</td>
</tr>
<tr>
<td>Central Locomotive Works</td>
</tr>
<tr>
<td>Crusader Rail Services</td>
</tr>
<tr>
<td>Custom Signals</td>
</tr>
<tr>
<td>Deichman's Depot</td>
</tr>
<tr>
<td>DM&amp;M Railroad Co.</td>
</tr>
<tr>
<td>Eagles Nest Miniatures</td>
</tr>
<tr>
<td>East Gary Car Co.</td>
</tr>
<tr>
<td>Evans Design</td>
</tr>
<tr>
<td>Get Real Productions</td>
</tr>
<tr>
<td>GHG International</td>
</tr>
<tr>
<td>Golden Gate Depot</td>
</tr>
<tr>
<td>Hackworth Model Trains</td>
</tr>
<tr>
<td>House of Duddy</td>
</tr>
<tr>
<td>Hundman Publishing</td>
</tr>
<tr>
<td>Irish Tracklayer</td>
</tr>
<tr>
<td>JAK Tool</td>
</tr>
<tr>
<td>JD's Trains</td>
</tr>
<tr>
<td>Just Trains</td>
</tr>
<tr>
<td>Key Imports</td>
</tr>
<tr>
<td>LaBelle Woodworking Co.</td>
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<tr>
<td>Mesa Models</td>
</tr>
<tr>
<td>Model Building Services</td>
</tr>
<tr>
<td>Model Creators</td>
</tr>
<tr>
<td>Model Tech</td>
</tr>
<tr>
<td>Mountain Model Imports</td>
</tr>
<tr>
<td>M.T.H. Electric Trains</td>
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<tr>
<td>Mullert River</td>
</tr>
<tr>
<td>NCE Corp</td>
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<tr>
<td>Nom's O Scale</td>
</tr>
<tr>
<td>O Scale Realty</td>
</tr>
<tr>
<td>Old Pullman</td>
</tr>
<tr>
<td>PA Heritage Models</td>
</tr>
<tr>
<td>P&amp;D Hobby Shop</td>
</tr>
<tr>
<td>Public Delivery Track</td>
</tr>
<tr>
<td>Raggs to Riches</td>
</tr>
<tr>
<td>Rail Dreams</td>
</tr>
<tr>
<td>Railroad Collectibles</td>
</tr>
<tr>
<td>Rails Unlimited</td>
</tr>
<tr>
<td>RCS of NE</td>
</tr>
<tr>
<td>San Juan Car Co.</td>
</tr>
<tr>
<td>Scenic Express</td>
</tr>
<tr>
<td>SMARTT</td>
</tr>
<tr>
<td>SNEMRR Show</td>
</tr>
<tr>
<td>St. Charles Model Works</td>
</tr>
<tr>
<td>Stevenson Preservation Lines</td>
</tr>
<tr>
<td>Sumpter Valley Depot</td>
</tr>
<tr>
<td>Suncoast Models</td>
</tr>
<tr>
<td>Sunset3rd Rail</td>
</tr>
<tr>
<td>Toy Trucker</td>
</tr>
<tr>
<td>Toys for Collectors</td>
</tr>
<tr>
<td>Turner Model Works</td>
</tr>
<tr>
<td>Twin Whistle Sign &amp; Kit</td>
</tr>
<tr>
<td>Valley Model Trains</td>
</tr>
<tr>
<td>Vinylbed/Hobby Innovations</td>
</tr>
<tr>
<td>Weaver</td>
</tr>
<tr>
<td>Western Reserve O Meet</td>
</tr>
<tr>
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</tr>
</tbody>
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Sept/Oct '07 - O Scale Trains • 69
Important New Information
Beginning September 1, 2007, we will have a new mailing address, PO Box 289, Exton PA 19341. Mail to the old address will be forwarded for at least six months. However, please use the new address after September 1.

Adios Atlas
Readers will probably notice that a new advertiser now graces the inside back cover. Atlas O has decided not to advertise in OSTM beginning with this issue. No explanation was given as to why they dropped their ads and I have not been able to get an explanation from anyone at Atlas.

But hey, it's their money and they can spend it as they see fit. I have a deep appreciation for Atlas O and its support of OSTM in our formative years. In addition, I personally feel that Atlas O has had a major positive impact on the recent resurgence of 2-Rail with the introduction of their 2-Rail track and switches. So thank you Atlas O for your past support and I hope you will return to our pages in the future. After all, where else can you really promote 2-Rail to the faithful?

The Internet - 1
I've been posting some great stuff at the OSTM Blog [http://www.oscalenmag.com/wordpress/]. If you haven't been by there in a while, take a look. I'm developing an industrial center along the track that leads to the Coal Creek coal mine complex. It's a single track, but I've managed to put several "doors" along the way to create more opportunity for operation.

To build this complex, I have used several commercially available brick buildings and kits. I reviewed one of those kits in this issue. The Acme Model Tool Company kit is produced by the good folks at OGR Publishing. Yep, that's O Gauge Railroading. It doesn't matter that OGR is a "mail" publication. What matters here is that they make a neat line of kits, reasonably priced, that are useful for O Scale modelers regardless of the number of rails in your track.

This industrial center has created another "need" on the layout and that's a credible background. Brian and I were talking about the industrial center just after I posted it on the blog, and he mentioned that a block of row houses above and behind the center would look great. Well, I had been thinking along those same lines. So, I've been making a block of row houses and I will be putting that process on the blog next. It may even be there by the time you read this.

Along with this industrial center, I have been working on filling in two of the layout corners. One will get a mine. The other will get a large factory. I'll be sharing these corner-filling techniques in a future issue of the magazine.

The Internet - 2
The internet is an incredible resource for modelers of all stripes. I keep a bunch of bookmarks specifically for O Scale sites that I can use for research and references, like current brass prices or bibliographies.

However, the internet can also be a source of useless information and noise. I have written before. Large sources of this noise are bulletin boards or BBSs. I monitor several BBSs and recently one discussion devolved into a trash-fest on the electronics used in many model trains. A couple people posted that owners of these newer models will be in for a huge surprise when the electronics die and they'll be faced with multi-buckled thousand dollar repair bills.

Can you say "techno-phobe"? Look, my dad was in the electronics business. I've been around electronic equipment nearly all my life. When was the last time your radio quit? When was the last time you needed a television set repaired? Talk to the guys that fly radio controlled airplanes and ask them the last time they had an equipment failure. Modern radio control models use frequency-hopping to eliminate control channel conflicts. Talk about sophisticated electronics.

Yes, there will be problems, as there may be with any piece of electronic equipment. But, overall, I think the control systems available for O Scale will perform well for many, many years before needing replacement. By then, it will be cheaper to replace those controls with newer and more sophisticated systems than we have now because that's the other trend I've noted about electronics. While everything else seems to get more expensive (cars, houses, gas, food, electronics get either cheaper or more sophisticated for the same money. Anyone doubting that only needs to look at a $35 DVD player when a DVD player with similar features was $250 or more only five years ago.

Setting Some Standards
One topic Brian and I have been discussing a lot lately is the state of O Scale, and, in particular, the influence of 3-Rail on the 2-Rail market. Brian will have more to say on that subject in our next issue but I want to start the conversation here with a recommenda- tion to all O Scale 2-Rail producers or locomotives. Provide all of your locomotives as DCC-ready if not DCC-included. DCC-ready means that all I have to do to make a locomotive run under DCC control is plug an appropriate DCC decoder into a socket provided by the manufacturer/producers. This is almost trivial for Diesels. For steam locomotives, it's a bit more challenging but still feasible.

The advantages of doing this are several. First, it will further encourage the use of DCC in O Scale. Second, if more O Scale manufacturers encourage the use of DCC, then DCC manufacturers will pay more attention to O Scale, and maybe we won't have to piggyback HO Scale sound decoders on O Scale decoders to get the kinds of systems HO and N Scale modelers enjoy now.

Being an "open standard", DCC should be the control system of choice for O Scale modelers who want command control of their trains. Modern DCC decoders also permit operation on straight DC, so a modeler who uses DCC isn't "locked out" of traditional DC controlled layouts.

Atlas O seems to be the only O Scale locomotive manufacturer that has embraced DCC whole-heartedly. They provide DCC-ready in the Silver Series and DCC-included in their Gold Series locomotives. Bravo to Atlas O for leading the pack. Now, how about the rest of you guys?

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