

The

Spring 2015

POTOMAC FLYER

Stan Knotts' Royal Oak and Southern



Photo: Tom Brodrick

Minicon



Photo: Marshall Abrams

In This Issue: Business Car • Thanks from Fairfax Station • Mark me up! Modeling and Operations • Achievement Program • Perfect Match for Circuitron • 3D Printing -Part II • Finding a Clinic You Remember • Freight Cars of the 1950's and 60's • Meet Mike Millitello • Swift & Co. Company Car • A Small Waterfall • Minicon Report • Model Railroads Go To War: A Book Review • Mechanical Repair of A Digitrax UT1 Throttle • Operations Initiative Report • Layout Open House Report Stan Knotts' Royal Oak and Southern • Coming Layout Open House—Ed Maldonado

The Division Crew

Superintendent
Brian Sheron, MMR
 301-349-5754
 email: Superintendent *

Senior Assistant Super.
Marshall Abrams
 301-588-1005
 email: Sr-Asst-Super *

Assistant Superintendent
Phil Scruggs
 703-239-2440
 email: Asst-Super *

Paymaster
Tom Brodrick
 301-253-0558
 email: Paymaster *

Clerk
Bill White
 410-535-4293
 email: Clerk *

Achievement Program
 Coordinator
Brian Sheron, MMR
 301-349-5754
 email: Achievement-Program

Webmaster
Bill Mosteller
 703-272-8190
 email: Webmaster *

Potomac Flyer Editor
Marshall Abrams
 301-588-1005
 email: Potomac-Flyer *

Layout Touts
Phil Scruggs
 703-239-2440
 email: Layout-Tours *

Layout Disposal Assistance
Clint Hyde
 703-803-3068
 email: Layout-Disposal *

* all email addresses end with
 @potomac-nmra.org
 Click on address to send email.



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Potomac Flyer

Potomac Division's Quarterly Newsletter

Submission Deadlines

Winter Issue December 1
 Summer Issue June 1

Spring Issue March 1
 Fall Issue September 1

On the cover: Stan Knotts' Royal Oak and Southern; photo – Tom Brodrick. (top) Minicon; photo – Marshall Abrams (bottom)

From the Business Car

by Brian Sheron, MMR, Division Superintendent

When it came time to put pen to paper and prepare the Superintendent's column for this issue of "The Potomac Flyer", I had to scratch my head a bit first, and think about what I wanted to write. Of course there is the Minicon that is coming up on March 28th, and that seems to be moving along well. The Minicon will have occurred by the time this is published, so I saw no sense in dwelling on what is planned for the Minicon.



However, it did make me think about all the effort that goes into planning and carrying out a good Minicon. The first thing you recognize is that it is rarely or never the work of just one person. To create and conduct a successful Minicon that the members like and will remember requires the work of many people. [Ed: after the elections held at the Minicon some Board and officer positions have changed.]

Board member Tom Brodrick took the responsibility to find and secure a good venue for the Minicon. This is not an easy job, as many places with facilities that meet the Division's needs for a Minicon either do not rent out their facilities, or the rental fee is very high. When your goal is to both keep the admission fee low, and only charge that which is needed to cover the expenses, the two can sometimes become mutually exclusive. In addition, Tom also volunteered to be the Minicon Chair.

Senior Assistant Superintendent Marshall Abrams is our technologist. Projectors and screens needed for clinics don't just "happen". Marshall had spent a fair amount of time finding and purchasing projectors for the Division that would meet our needs. He also does all the coordination with the clinicians so when they give their clinic, their presentation is loaded on the projector and ready to go,

with no last minute "snags." All this and he still finds time to prepare and publish "The Potomac Flyer."

Board member Bob Reid, the Division's Clerk, volunteered to handle the clinics. Finding folks who are experienced in a specific field of model railroading, and are willing to prepare and present an interesting, entertaining, and informative clinic on their specific field of expertise is not an easy job. And trying to make sure the clinics will be of interest to a broad and diverse audience is an added difficulty.

Board member Mike White, the Division's Paymaster, volunteered to handle the registration. This, in many respects, is a necessary but thankless job. In addition to sitting at the registration table for the better part of the Minicon, Mike makes sure we have money on hand for making change, and handles all the expenses associated with the Minicon.

Phil Scruggs, an appointed Board member, has stepped up to the plate and is in charge of the most important part of the Minicon for many of us; coffee and donuts in the morning, and sandwiches and drinks for lunch! Feeding over 60 people is not an easy task! In addition, Phil was also our liaison with the modular clubs that set up layouts at the Minicon.

So what does the Superintendent do? Years ago, an elderly gentleman in our church would always wander over during a church work day and say "There isn't the job yet that can't use one more supervisor." While designating myself as supervisor sounds like a nice job, unfortunately, I couldn't get that job! Therefore, my job is to oversee all of the various activities and make sure they are all coming together. Also, I coordinate the model and contest room, line up volunteers to handle the white elephant sale room, and also Chair the annual business meeting.

And when the Minicon is over, and everyone leaves, remember, it is the volunteers that have to clean up the place, put the tables and chairs away, etc.

The point of all of this is that it takes volunteers to make the Mincon (or any event) a success. The Division is always looking for volunteers, so if you are interested in helping

out in the Division, or if you have good ideas for Division events and/or activities, don't be shy. Step up and volunteer your talents. The more volunteers we get, the more we can accomplish. (And don't forget, volunteering earns you points towards your "Association Volunteer" AP certificate!). **I**

Achievement Program News

by Brian W. Sheron, MMR

During the past quarter, there has been no activity in the division regarding the achievement program. I am assuming many of you are working towards a number of AP certificates, and I encourage you to keep at it.

What I have found is that many members are involved in activities that count towards AP certificates, but either don't realize it, or don't take the time to record it. For example, if you participate in operating sessions, the hours spent operating in these sessions count and just need to be properly documented. If you volunteer to host an open house, or if you participate as part of the "operating crew" at a friend's open house, the hours you spend count towards the volunteer AP certificate. For those of you that are taking advantage of the monthly operating sessions the Division is offering, don't forget that operating at these sessions counts towards earning your Chief Dispatcher's AP certificate.

If you volunteer to help at a Mincon or MER convention, this time also counts towards the volunteer AP certificate. However, there are two things to remember;

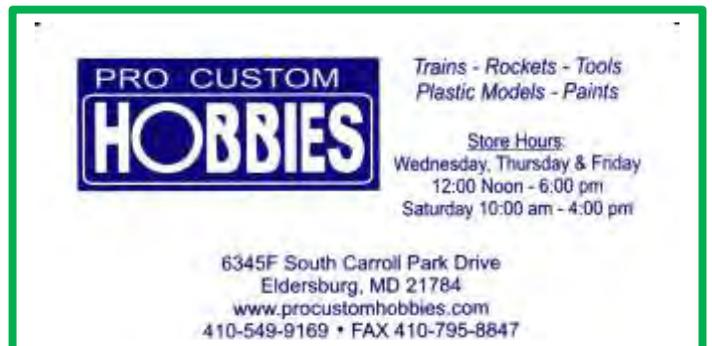
- 1.) there is no one else recording when you volunteered or how much time you spent. This is your responsibility.

- 2.) The NMRA requires that another NMRA member (who is or was in a position of authority associated with the activity in question) verify your service dates and times by signing off on the NMRA Volunteer log sheet.

I have had several members tell me they volunteered at a convention or Minicon 6-7 years ago and want to know how to get credit for their service. What I tell them is that they need to log the specific activity they were involved in, and they need to get an NMRA member who was there and can sign off on the NMRA form that they did the job they said they did and the time they spent doing it. This is an NMRA requirement.

So remember, there are many of you that probably have a lot of hours that could be credited towards several AP certificates, but you just need to document them and get them verified.

[Click here](http://nmra.org/education/achievement-program) to go to the NMRA Achievement Program site to learn all about the program, or paste the URL into your browser <http://nmra.org/education/achievement-program>. **I**



Mark me up! Modeling and Operations – A Perfect Match

by Mat Thompson

Many model railroaders will tell you they are modelers, not operators. Fifteen years ago, I was one of them. I constantly adopted new materials and new techniques and, like most other model railroaders, I was obsessed over the details. That's all fine and I was having fun.



But when I became an operator, I realized I had been trying to create reality with one eye closed. I didn't understand how track arrangements, the makeup of trains, railroad business practices, and similar subjects contributed to the railroad scene. The result was the railroad part of my model railroading was nicely detailed but not logical and therefore, not very realistic.

Would I have eventually figured out some of these things without being an operator? Maybe, but being with other operators, I am with people who know a lot about trains. Every session, I hear and see things I didn't know and often haven't even thought about. In addition, sessions are on different railroads. It's seeing and doing on other layouts that bring the points to life.

Are the details important? I think so. Creating the world in miniature is what we do in the hobby. Our goal is to create the illusion of a prototype railroad. The pictures below are examples of things I have learned or

become much more conscious of since becoming an operator. If you go to some sessions, you will soon have your own gallery of good modeling ideas.

On my Oregon Coast Railroad [1], loaded stock cars headed to the Swift Plant are right behind the engine. The ride is smoothest at the front of the train reducing the chance of injuring animals in transit, a problem railroads did not want. The stock cars are all Northern Pacific. Railroads worked hard to keep shippers and serve industries. A string of stock cars from different railroads would not be common.



An experienced operator would take one look at the OCR boxcar and know someone's about to be in big trouble [2]. Railroads didn't block roads for more than a few minutes without hearing from the local authorities. Understanding railroad procedures helps prevent scenes that wouldn't or at least, shouldn't, happen on the prototype.

One of the biggest lessons I have learned is that railroads make their money serving large industries, not the single car businesses common on model railroads [3]. Fortunately, the part of the industry we need to model is loading doors and other freight handling facilities. That means industries can justify a lot of traffic in a small space. The paper mill I



am kit bashing from Walthers parts is 7 feet long and less than 18 inches wide. It easily justifies inbound and outbound traffic of 15 to 20 cars in an operating session.



The oil-loading platform [4] is by Walthers and I could not figure out how the parts fit until seeing an assembled version during an operating session. That's a nice bonus of operating on different layouts. Looking at a waybill showing where the tank cars came from and would be going, I realized the loading platform would be owned by a specific oil company and would only fill their cars or leased cars. Spotting cars here from competing oil companies would be a mistake and distract from the realism of the scene.

If there had been a paper mill in the real town of Depoe Bay, Oregon, in 1956, this Hooker Chemical Company tank car [5] from Tacoma, Washington, would have been the

one bringing chlorine to the plant. The amazing variety of tank car types and the products they carry adds interest to operating sessions. There is also a serious error in this picture. For safety reasons, tank cars were separated from cabooses and engines by other cars.

If it is 1956 on the OCR, why is an old outside-braced boxcar at the Swift Plant? The answer is one of the great things about operations: you begin to appreciate how unique even the most ordinary of cars can be. Packing plants sold animal hides to tanneries. The hides were hauled in old cars because once a car is loaded with hides it's contaminated. Fortunately, I don't model odors but here's an operator puzzle for you: if a train leaving Swift has a hide car and a tank car, which one do you think the conductor would put further from the caboose? **I**

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Engineers and Fireman say "Mark me up!" to get their name on the crew Call Board for their next run. "Mark Me Up" is a quarterly column focused on how model railroaders can become operators and members of the operations community. Mat Thompson's Oregon Coast Railroad was featured in *Great Model Railroads 2014*. Building structures and scenery are his favorite modeling activities. He is also an avid model railroad operator and regularly attends operating sessions.



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Thanks from Fairfax Station

by Phil Scruggs

In the last edition of the Potomac Flyer, it was announced that the Potomac Division donated \$500 to the Fairfax Station Railway Museum allowing it to get started in its new project; a Garden Scale Railroad.

On behalf of the Fairfax Station RR Museum I would like to say thank you to the entire Potomac Division for this donation. This very generous donation has allowed the museum to purchase some engines, stock cars, and track from a local member at a very generously discounted price.

When Fairfax station opened in the 1850s, it was built to improve the commerce of the local community that was rich in lumber, dairy, and agricultural goods. The intent was to get these goods to the port in Alexandria and then to other ports along the East Coast and overseas. With the onset of the Civil War



The station was closed in '69 and became all but abandoned for a number of years. A handful of local citizens, including residents that once worked at the station, started an effort to save Fairfax

Station and, after getting a nice land grant very close to the abandoned station, were able to take the salvage a lot of it and moved it to its present location.

The station is open once again, as a museum, serving the local community of Fairfax. The museum regularly hosts modular model railway clubs (to include T, N, HO, O, and G scales). There is a small section on the museum grounds, on the east side of the parking lot, that is about an eighth of an acre, and is perfect for building a permanent garden railroad.

The museum is also starting up the Fairfax Station RR Museum Garden Scale RR Club for folks who have an interest in helping build the railway and using it once becomes fully operational. We are still in the planning phase but are ready to put the shovel to the dig in the spring. Here are a few of the biggest tasks ahead of us:

1. We will level the terrain, and develop a plan for controlling weeds. We will identify and plant local indigenous, noninvasive, miniature plants.



Fairfax Station in the Spring of 1863

the station, and the Orange & Alexandria line in general, became heavily involved in the conflict. Both sides saw advantage in using the rail line for moving troops and supplies, and both sides sought to prevent the opposite side from doing just that. The O&A is arguably the most contested rail line during the Civil War.

Norfolk Southern freight and the Virginia Rail Express regularly pass by the station now.



Fairfax Station re-built in 1902.

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2. We will to build a shed to house the control station and to store cars and supplies.
3. We will to bring electricity to the area.
4. We will to put down elevated track and then turn on the throttle.

We are very excited about this project and we have received a lot of moral support. Again, we are grateful to the Potomac Division for a kick start and we will keep the Potomac Division apprised as to our progress. If anyone is interested in helping out with donating track, stock cars, funds, manpower, or good old fashioned expert advice please contact me! 

Phil Scruggs has turned his living room into a HO Scale Civil War layout featuring both the Orange & Alexandria and the Alexandria, Loudoun & Hampshire lines of Northern Virginia. While the layout is a year or two away from operation, he enjoys kit building some of the 4-4-0 engines and scratch building the structures. Phil spends a lot of his free time supporting the Fairfax Station Railroad Museum as a docent, modeler, and board member. As a rail enthusiast, Phil is putting in a Garden Scale railroad on the museum grounds.

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The Perfect Match for Circuitron

by Pete LaGuardia

for



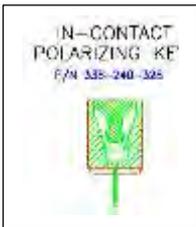
As long as I can remember Circuitron tortoise has been the defacto standard operating turnouts.

The problem with the tortoise edge connector,



the board does not use an industry standard spacing, and off-the-shelf PCB edge connectors won't work.

For many years EDAC Inc P/N EDC305200-ND has been the default used. The problem with this connector is it employs 10 contacts where the tortoise only has 8.



To solve the problem with the EDAC connector, you can add the polarizing key from EDAC P/N 338-240-328.

Recently, there's been a lot of advertisements for a blue connector (left) which uses 8 contacts but also has similar problems using it with the tortoise.



Both connectors do not match the tortoise contacts exactly due to the spacing on the tortoise edge

connector.

The connector from Kobiconn P/N 158-P02EK381V8-E 90 degree Connector (right), is actually a perfect match for the tortoise eliminates the problem from the above two connectors at a price of \$2.33 each, 50 each @ \$1.95.



You will also notice, Tortoise's Snail, which has an on board DCC decoder, uses Kobiconn connector.



For new construction, you will be able to solder Kobiconn connector on the Tortoise at your workbench and the connector employs screw terminals for adding wires.

For existing construction, obviously the green and blue connector is a lot easier to install as long as you provide some method to keep the connector in line with the Tortoise



contacts on the PC board. **I**

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Pete's The New York Central Western Illinois Division (WID) is set in 1953 and operates under Timetable and Train Orders (TT&TO) with Car Cards and Waybills and fills a 35' by 35' room. The WID operates from Kansas City, Omaha, and Des Moines on the west, through Moberly (MO) and Hannibal (MO), to Danville (IL) and Indianapolis (IN) on the east. Bench work and Track work are 99% complete and Scenery was started in January 2014. The control system is radio NCE with 7 power districts. Activities include an engine facility for Steam and Diesel, 18 stall roundhouse with programmable indexing from New York Railway Supply PTC Model 3

3D Printing for Model Railroading, or: Getting the Right Tomato Soup—Part II

by Gil Fuchs

Part I of this series presented the reader with a general introduction to 3D printing and its more specific application in Model Railroading. In part 2, I would like to present four commonly used, practical approaches to producing models for model railroads using 3D printing. Two of the four approaches described require the modeler to produce a design for the printed object; several tools and methods for designing 3D model are referenced. A more detailed review of these tools and useful features will be provided in future articles.

Approach 1: Order custom 3D models printed from designs offered on the internet.

This is the easiest and in some ways safer approach to getting a custom 3D printed model that would fit your specific railroad. A great advantage of the public Internet and the evolution of social networks is the ability to interface with a large audience of peer modelers, some sharing the same or similar railroad and era of your choice. Even though your long sought after model is not produced in mass quantities, there is a chance that the model was uploaded as a design file to sites such as “Shapeways” or “Thingiverse”.

Hon30 models were promoted during the 70’s and gained some acceptance in the MR community. In later years their popularity declined, partly because large manufacturers focused on other scales such as Hon3 and On30. They were catering to narrow gauge, steam era modelers interested in the D&RG and other western Colorado railroads, and driven by popular demand. This situation left modelers of eastern 2’ (primarily narrow gauge Maine short lines) with a limited choice of models.

With the advent of 3D printing sites, several modelers uploaded and shared designs in HOn30 - some are available for download

and others can be ordered and produced for a fee. The contributing modelers could not afford the costs and risk involved in commercially producing and marketing their models using conventional methods, as there was not enough market demand for the models to justify such production. For those interested in HOn30 modeling, 3D printed models provided a solution to this problem.

Models offered online are reviewed by peers for quality, availability and pricing. Using publically offered 3D designs will save you the significant effort required to design the model; the downside is that you may have to compromise on a close enough model, quality of the product is not guaranteed (many of the uploaded models were never actually test printed), and cost of ordering the print is significantly higher than a mass produced model or a home printed one. The product is usually not complete and additional work is required - de-burring and sanding the surfaces, adding parts such as trucks and



This Hon30 model is offered for production in Shapeways by Tebee. A 3D model file (STL) can be downloaded for home printing as well.

couplers, painting and adding decals. Some modelers would allow downloading and modifying their designs - in some ways this is similar to kitbashing while using computer software. If you find designing your models to be a rewarding activity in itself and are willing to spend the time and effort involved, this approach may not be the best for you.

Approach 2: Download a design file and print at home

This approach is similar to the first approach, including most of its advantages and disadvantages. It is more cost efficient in that raw material used for home 3D printing is significantly cheaper than ordering a printed product. On the other hand, the initial cost and effort of acquiring and setting up a 3D printer may be significant, you would have to become proficient in operating the printer (in some ways an art form), and in converting the downloaded models to a format suitable for your 3D printer. Results are likely to improve over time and with experience. The quality of home printing is usually limited compared to prints ordered from the Internet. There is an inevitable amount of failed prints that result from operating problems, such as uneven heating, warping materials and problems with adhesion to the print bed platform. Those should be taken into account when considering this approach.

Approach 3: Design a 3D model, upload and order prints online

This is a popular approach adopted by modelers not wishing to own a 3D printer or deal with the effort involved in the printing process.

The primary effort required in this approach is to design and produce a 3D model to be uploaded for printing and/or sharing. The good news is that there are many freely available sites, downloadable software packages and tools to assist in this process. If you are willing to share your design, you may receive royalties from the printing site service for every print produced and sold - which provides the opportunity to market your

designs without risks and costs involved in traditional commercial production, and with no commitment to minimum production quotas. OTOH there is a learning curve involved in using 3D design software, which may not seem intuitive to operate. For MR purposes, mechanical part oriented 3D design packages are usually preferred. Animation capabilities, effects and presentation features such as special coloring are not required - fine resolution, accurate measurement and parametric dimensioning of static objects is needed for producing accurate models. In order to produce detailed 3D printable models, the package has to support vector modeling and solid objects, encompassing closed volumes (some 3D modeling software packages offer surface-mesh based modeling which does not ensure the model can be converted to a 3D print). In addition to the 3D design package, consider tools that repair common design errors, such as holes, intersecting surfaces, uneven surfaces etc. You may also find tools for converting 2D design drawings to a format acceptable by 3D design software useful; the drawings serve as a basis for the 3D design. Once uploaded, the printing site may offer services to review the design and prepare it for successful printing. Other tools offer the reverse feature and can produce technical 2D drawings from 3D objects.

Approach 4: Design and print at home

Once you acquire a 3D printer, become proficient in home 3D printing and can master the 3D design package and tools of your choice, designing and printing at home becomes an attractive approach. Printing and material costs are relatively low, most prints are expected to be successful, and you have the option to produce as many duplicate prints as necessary. No shipping delays are involved, although printing may require several hours or an overnight session - depending on the complexity of the product. As you control the design, most modifications and updates require relatively little effort.

The Design Toolbox

3D Design software is available commercially as well as for free download. One popular free package that I find very feature rich is Blender:

<http://www.blender.org>

Many features in this package are designed to support animated media presentations, movies and studio modeling which are generally not useful for railroad modeling, however it has plenty of other features and add-ins to assist in 3D design. The package is by no means simple to use, and has a relatively steep learning curve - but once skills are acquired, it covers most modeling needs. Recent versions include a toolset for designing, checking and repairing models specifically for 3D printing. Beginner and advanced tutorials, documentation and support discussion groups are available. Another package I have used is FreeCAD. While quite feature rich, it is more oriented to mechanical engineering and parametric design. I find it easier to learn than Blender and it can get you up to speed quickly:

<http://www.freecadweb.org/>

Similar to Blender, FreeCAD documentation is available online as well as helpful tutorials. Support discussion groups are available; there is an on-line support community which is relatively small and growing.

Sketchup is a popular on-line option suitable for beginners. The free version (Sketchup Make) is useful for simple designs, and does not offer parametric dimensioning. <http://www.sketchup.com/products/sketchup-make>

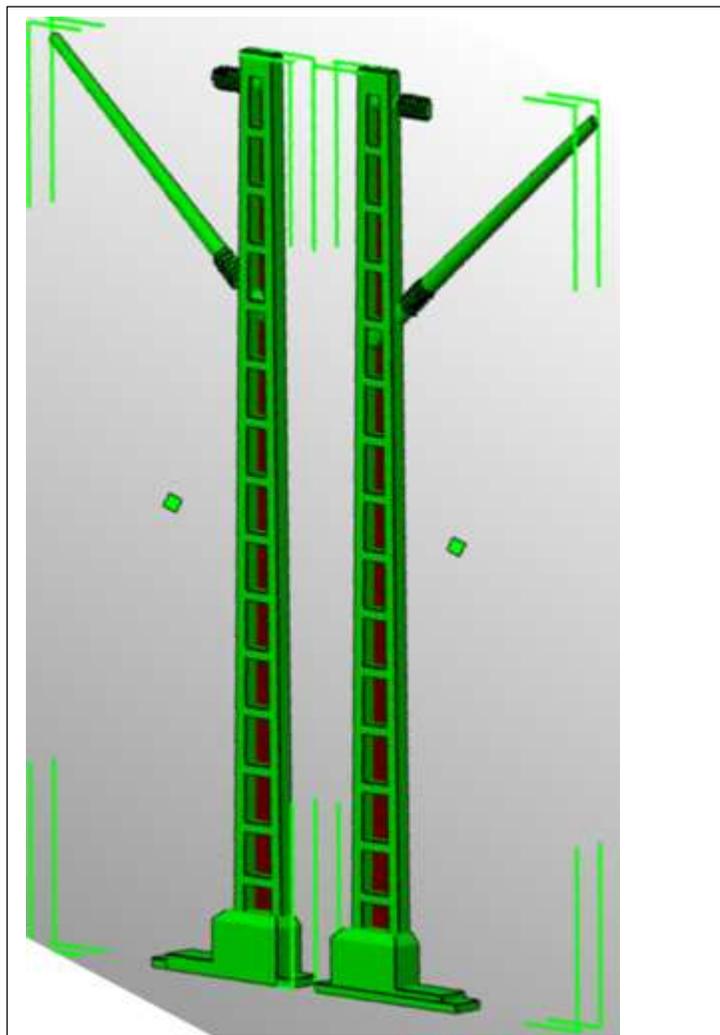
Other widely used commercial 3D design products that can be purchased are AutoCAD, 3D Studio, the profession version of Sketchup (Pro), and Maya. These tend to be pricy but you may find the investment justified.

In many cases, as the design gets more complex, check and repair tools are useful to make sure the produced design is ready for 3D

printing. One such freely available tool is NetFabb:

<http://www.netfabb.com/basic.php>

I find the basic version adequate for most MR needs. An improved licensed version can perform more testing and has improved repair algorithms. This package is offered as either



I designed this model of a catenary pole using Blender, repaired and split it in half to produce flat parts using netfabb basic. Splitting is a technique used to save in printing discardable support structures which are necessary for printing overhanging parts, but are wasted material otherwise.

an on-line service or software for download.

Finally, if you find two dimensional drawings to be a good starting point for developing 3D models, a nice conversion package that might be useful is Inkscape:

<https://inkscape.org/en/>

This package can deal with many common formats, converting from one to another and allowing the use of drawings in 3D design software.

Gil Fuchs is a Senior Information Officer in an international organization. He started his relationship with model railroads at a very early age, helping his father build a table size

HO layout. He has been involved in model railroading ever since, with a few interruptions. Gil enjoys operating, building and designing layouts, and uses his expertise in electrical and software engineering to design and produce MR electronics solution. Recently he developed an interest in scratch building techniques and was introduced to 3D printing.

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From the Webmaster Finding a Clinic You Remember

by Bill Mosteller

You're working along on your layout or other modeling project when you remember that you attended a clinic that related. But you can't find your notes, and don't even remember when or where it was. No matter, the Potomac Division web site preserves presentations from our Minicons for you at: <http://potomac-nmra.org/Clinics/Clinics.html>

I recently revised the clinics page to include Marshall's Waterfall and Mike's Waybill

clinic, and Brian's Sign presentation there has been updated. Check it out!

Speaking of getting the most out of the division, have you considered joining our Yahoo Group? The group provides immediate, two-way communication among our membership. Join now:

http://groups.yahoo.com/group/PD_NMRA/

Have 50 model railroading clinics right in your living room.

Just because you can't make it to a national convention doesn't mean you have to miss out. Right now the NMRA's Kalmbach Memorial Library has over 50 DVDs of clinics presented at national conventions from 2002 to 2010. Each is available for NMRA members to borrow for the cost of processing and postage.

So you can see clinics on everything from decoders to design, tools to techniques, helixes to highways, and research to resin casting.

All from the comfort of your very own couch.

Visit www.nmra.org and go to the Kalmbach Memorial Library page for a complete listing. Or call the Library at 423-894-8144. Then, get that popcorn ready.



The Ancient Modeler: Round Five Freight Cars of the 1950's and 60's (Continued)

by Bob Rosenberg



Sometimes it's difficult for me to get my mind around what we have available today in freight cars when compared to what we had 50 or 60 years ago. I was looking at ads in MR for box cars, Kaydee's, Athearn's, Atlas,

Intermountain, etc. and thought back to what we had to go through (those of us who had that kind of talent, anyway) to get the level of detail that's currently available to everyone (for a price, of course. Things were much less expensive then).

I'm reminded of this because I came across a collection of these older kits a few years back. They were all assembled by a then-retired naval officer, but his health had deteriorated to the point that he was planning to leave the area, and with no family to take them, I ended up buying much of the collection. Many of them, I expect, were put together while he was at sea; one had the time to do that sort of thing when you weren't standing watches (I certainly did when I was on a ship). They all date back to the 1960's and still look good. I run some of the cars on occasion, but many have not seen the light of day for years until I decided to write this article.

His structures, however, also kits from the same period, have been incorporated into my own layout; while I readily acknowledge that they're more appropriate to western Colorado or Idaho than to western Massachusetts, they are so well done that I wanted to display them where others could enjoy them too. Since the boxes are long gone, I have no way of identifying them other than memory and by comparison to items that I have accumulated elsewhere; some of them have already shown up in previous photos. I expect that there are many of you out there who will read this and recognize them immediately; if so, let me

know what they really are and I'll add that information into the July issue. In any event, it opens a window on to what was available, at least for the more serious modeler, long before those beautifully detailed kits mentioned previously were available to the mass market, or at least the mass market that consists of those that can afford them.

Most of his rolling stock and structures, as noted above, represented the American west in the late 19th century. Those cars that



Mort. Final: Undertaker; probably a Campbell kit



Susanna's Frocks; Campbell kit.

weren't built from kits already painted and lettered for real railroads he lettered for his private road, the *Crooked Creek and Cimmaron*, using individually applied decals or dry transfer lettering. There were one-of-a-kind items, like his C. C. & C. pay car, or something really off-the-wall like the U. P. Photography Car with a built in skylight to allow pictures to be taken inside the car. Some of his craftsman type wood cars were eventually reproduced in plastic by other manufacturers, Ambroid kits, for example, by AHM, and Silver Streak kits by Model Die Casting under the *Roundhouse* label. One of the photos shows the same version of both the



Matthew's Mercantile; probably a Campbell kit



Scarlet Slipper Hotel and Saloon; Campbell kit



CM Stock car; unknown kit

S. S. original and the M. D. C. repro car side by side. Some of the structures, particularly the Campbell Kits, can still be found at train shows, flea markets, on eBay, or occasionally

stuck on a back shelf of a hobby shop somewhere. Some of those buildings seem to have been around forever: *Susanna's Frocks* dress shop, or their little red school house, and the *Scarlet Slipper*, a combination saloon, dance hall, and hotel (or maybe a different business masquerading as a hotel) that pretty much speaks for itself. Even back then model



Silver Streak wood T&T box car (left), MDC plastic T&T box car (rt)



Little red School House; Campbell kit



LV box car; probably Silver Streak kit



CC&C MOW car; unknown kit



UP Photography car; unknown kit

railroaders were not above slipping a pun in here and there whenever the opportunity presented itself; note the undertaker's sign on his building: Mort. Final. Interestingly enough, although his building skills were excellent, his actual railroad, at least the one he had when I went to his home to see his collection, was a simple oval with a couple of sidings on a four by seven piece of plywood board. I took it along with everything else with the promise that I would find it a good home, which I was able to do. Potomac Division modelers are very accommodating that way. I expect that cars and structures were what he liked to do best, since operation obviously not a big part of his life. He did have a collection of mostly brass traction that I sold off to a member of the Northern Virginia club, keeping in mind this was long before the age of eBay; I could have done much better for him now. In any event,

the gentleman passed away shortly after he left the area.

Apparently, I've written enough of these now that some of us other Potomac Division ancients out there are beginning to send me



Silver Streak wood T&T box car (left), MDC plastic T&T box car (rt)

feedback on the series. Bill Mosteler mentioned that Main Line Models was at one time was headquartered in Northern Virginia, and John Teichmoeller sent this commentary along: "I enjoyed the article on ancient HO car kits. I built many of them when I was in high school for a friend of my mother who was building a 'private' model railroad museum and paid me to build them. You might want to add that a lot of those kits, especially Main Line Models and Silver Streak, are still being



NYC Grain car; unknown kit



Two CC&C 30 foot wood box cars; unknown kits



Ulrich kit Track Cleaning car lettered for CC&C



CC&C Small Tank car (probably for water) unknown kit

produced under the name of Ye Olde Huff n' Puff; they advertise in all the magazines and have a website."

Bob Rosenberg's current railroad, the Berkshire Air Line Railroad Company, is a fictional bridge/short line set in western Massachusetts in the 1950's that uses New Haven, B&M, and NYC equipment.

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CC&C Side Door caboose; unknown kit

We'd Like You To Meet: Mike Millitello

by Roger Sekera



This column spotlights model railroaders in this area who have achieved notable progress early in their careers. The concept is to focus on one person who is a strong modeler, has or is working on his or her own layout, has some "standing" in the model railroad community in this area, evidenced by their participation in either a club or some other communal activity.

Mike has recently emerged as a major league player in the greater Washington DC area model railroad world, primarily through his involvement, as a co-owner, of the Great Scale Model Train Show (www.gsmts.com). Mike and his partner, Scott Geare, bought GSMT from former owners Howard Zane and Ken Young in early February, 2014 and based on what I saw at the February 2015 Timonium Show, a major rejuvenation of this long running show is in process. Mike told us, "I never imagined owning a train show and have learned what an enormous effort it is. Planning, working with vendors, handling reservations, advertising, insurance. Only 4 shows per year, but we work all year long producing them."

Mike does consider himself to be a model railroader but participates in the hobby in a somewhat different manner. "I have bench work for a small layout, but once I got into custom painting HO scale models and then selling HO scale equipment, available time became an issue. In addition to the train shows, Scott and I are also co-owners of 'Makin' Tracks' (www.ezbizwebsite.com) which sells model railroad products primarily by mail order and at the shows."

Mike notes that his interest in model railroading in general peaks when the subject comes around to first and second generation Diesels. Born and raised near Buffalo NY, he graduated from Depew NY H.S. in 1991 and

then attended Erie Community College. "I was fortunate to live near several major rail yards and I enjoyed watching the trains coming through the area on their way down from Canada. My brothers and I had a large layout in the basement constructed of three 4x8 sheets of plywood." His career began as a Firefighter. He spent several years operating on an engine company but then became a paramedic and transitioned to an EMS unit.

"I lived near Conrail's Frontier yard. In a way, that's why I started painting engines. There were a number of Athearn F7s as well as a long list of "blue box" cars that needed working up. I enjoyed bringing these older collections back to life. That took me to a pile of train shows and, eventually, to meeting my future partner Scott Geare.

"When I do build a model railroad it will be small transition era layout. But I wouldn't limit myself to any era or railroad. I'd want to be able to run whatever inspired me at the particular moment."

Until that does happen Mike seems to have his hands full with what we call "the Timonium Show," fighting fires, rescuing people, the retail operations of Makin Tracks and painting and restoration of locomotives and rolling stock. He is also the father of a teenage son and daughter. He is a busy man.

Mike's and Scott's vision for the train shows is an enterprise which is strong on service and building a community of vendors



and hobbyists. “Renting empty space, collecting admissions and then sitting back just aren’t enough,” he says. “We are committed to this hobby, and see the shows as one way to improve on the association between vendor and hobbyist. Just over a year ago I never would have imagined I would own a train show. It has presented Scott and me with an enormous opportunity to actually put into practice the ideas we have always

had about promoting and serving the hobby. It is hard work, but well worth the effort.”

Roger Sekera, a retired executive search consultant, lives in Potomac Maryland. His HO scale Clinch Valley Lines (CVL) models railroad activity (heavy coal balanced by general merchandise traffic) in 1959 in the Southwestern area of Virginia. The CVL has been fully TTTO operational for over four years.

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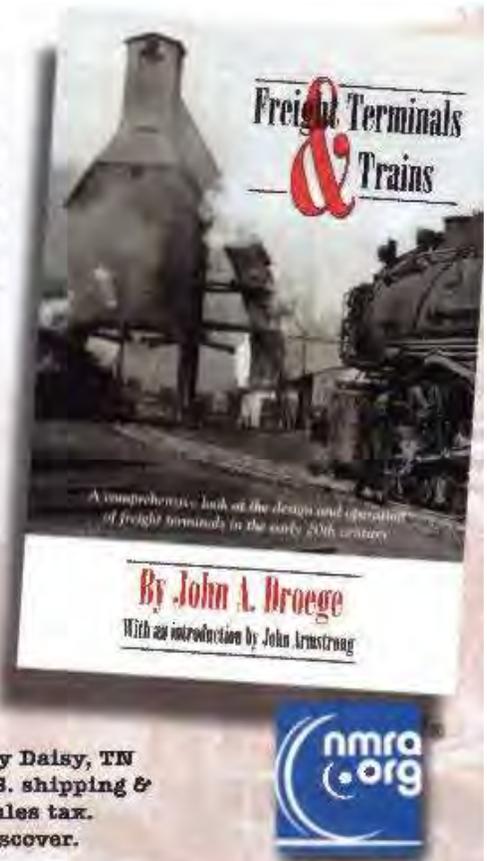
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Company Cars

by Mike White



It occurred to me that it would be interesting to know a little about the companies named on some of our modeled freight cars. There are many kits and ready-to-run cars available decorated with the names of companies that use or used the type of car modeled. Some are long gone but others are still in business today. The old billboard reefers are the most familiar example but there are other types as well. This series will look at some of these and provide some background information on the company behind the name.

Swift & Co. Chicago, IL

During the 1850s, when he was still a teenager, Gustavus F. Swift started to work in the beef business in Massachusetts. In 1875, Swift began buying cattle in Chicago to send to his family's butcher operations back East. He quickly revolutionized the meat industry by using newly developed refrigerated railcars to ship fresh meat from Chicago to Eastern markets. The company soon set up a national network of branch offices, which allowed it to control the distribution of its meat across the country. By 1886, when the company slaughtered more than 400,000 cattle a year, Swift employed about 1,600 people. Between 1887 and 1892, new packing plants were opened in Kansas City, Omaha, and St. Louis. By the time the founder died in 1903, his company grossed \$200 million in annual sales and employed about 23,000 people across the country, including over 5,000 workers at its slaughtering plant in Chicago's Union Stock Yard. In 1908, Swift plants across the country slaughtered a total of about eight million animals. By this time, Swift owned a fleet of nearly 5,000 refrigerated railcars. Annual sales reached \$700 million by the late 1920s, when the total workforce of the company—which ranked as one of the largest industrial corporations in the United States—consisted of about 55,000 people.



Swift stopped slaughtering in Chicago in 1953, but its corporate headquarters remained in the city. In 1973, by which time meat had become only one of its businesses, Swift became part of Esmark Inc., a holding

company. During the 1980s, Esmark's meat division was spun off and moved to Texas. Swift, once one of Chicago's leading employers and largest companies, no longer has a presence in the city. From the early

1990s through the early 2000s, food conglomerate Conagra owned Swift's operations. Swift & Co.'s divisional headquarters were located in Greeley, Colorado.

This entry is part of the Encyclopedia's Dictionary of Leading Chicago Businesses (1820-2000) that was prepared by Mark R. Wilson, with additional contributions from Stephen R. Porter and Janice L. Reiff. **I**

Mike White is a member of several clubs and historical societies all rail oriented. Mike is past MER Secretary and Potomac Division Paymaster. His Solomons and Patuxent Railroad, inspired and informed by the Maryland and Pennsylvania Railroad, represents a rural north-south line between Owings, MD and interchange with the Chesapeake Beach Railway and Solomons Island.

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A Small Waterfall

by Marshall D. Abrams



I've always liked waterfalls, so I decided that one of the cuts on my layout

would have one. I recently upgraded a three track cut on my layout making a rock wall following the techniques described in the clinic by Bob Johnson¹. When I built up the rocks, I left an opening for water to flow out of at the top of my future waterfall. The technique I used was a variation on the common technique of using a transparent medium to simulate the falling water.

Although I'm discussing a clear waterfall of clean water, the same technique can be used to model a drain pipe of dirty water, such as drainage from a retaining wall or a sewer pipe polluting a river or stream.



There's a drainage ditch between the track and rock wall face into which the water falls. The water in the ditch is EnviroTex Lite two-part epoxy resin, which pours and levels

out easily before it sets.

If you're modelling scummy or dirty water, you add a little acrylic paint to the epoxy when mixing the two parts. It's a good idea to make a series of color samples with different amounts of color added to see which you like. Be sure to label the samples with the amount of colors added.



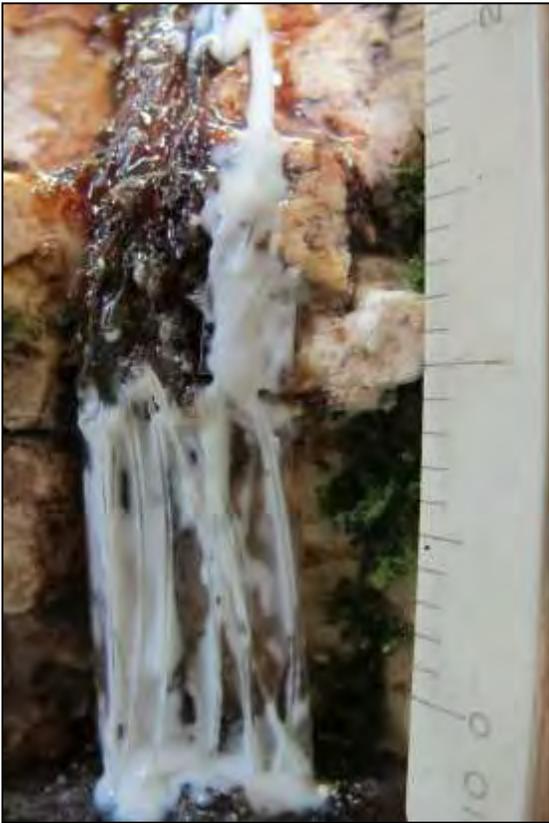
The base material of the waterfall is clear plastic packaging scrap. I chose a piece with a little curvature to match the rock ledge from which the wall starts its fall. I think that a curved waterfall is more beautiful. The scrap was repeatedly cut and test fit until the base rested on the water in the ditch and the top was just below the rock ledge.



I secured top and bottom with Aleene's Original Tacky Glue. This glue is my waterfall "magic ingredient." It is white when wet, but dries to a clear finish. Using a bamboo skewer as an applicator, I built up rivulets or cascades to give texture to the surface of the waterfall.

As the picture shows, I added bristles from a nylon paintbrush for individual cascades.

¹ [Rocks Made Easy -- Working with Rock Molds & Coloring with Dyes by Bob Johnson \(http://potomac-nmra.org/Clinics/Clinics.html#Rocks-easy\)](http://potomac-nmra.org/Clinics/Clinics.html#Rocks-easy)



Nylon bristles form individual cascades

Positioning the individual bristles is very tedious. Work slowly and allow the Tacky Glue to set up before positioning additional bristles. The picture on the right shows the Tacky Glue partially white and partially clear. When applying the Tacky Glue I allowed a small amount to puddle at the base of the cascade in the ditch.

In order to get a smooth flow of water, I alternated applying the Tacky Glue with a very small pour of EnviroTex. I mixed a capful and poured it at the very top of the waterfall so that it flowed down, filling in voids and adding natural



Tacky Glue partially white and partially clear when fully set

touches, such as a small puddle on a rock ledge part way down. I used the skewer to add some epoxy at places I thought the water might splash.



Marshall's layout, the Abrams Railroad Empire, (https://home.comcast.net/~abrams_railroad/) is designed for operation using Digitrax DCC. With an abundance of industries, towns, yards, and interchange tracks, the 20' by 22' walk-around has adequate activities and aisle space to keep as many as 8 operators busy during a session. There are operating dwarf signals to indicate the throw direction of the turnouts, operating block signals, and additional repeater signals above the back drop to indicate the traffic situation with some of the less visible track for the convenience of the operators. Marshall has served the Potomac Division in one position or another since 2003. He is currently Senior Assistant Superintendent and Editor of the Potomac Flyer.

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Minicon Report

The 2015 Potomac Division Minicon was held on Saturday, March 28th at St. Matthew's Church in Annandale, Virginia. PD has held many Minicons at St. Matts; it is well suited to our program and attendance.

Mike White opened registration at 8:00 am and registered 65 attendees. Mike noted afterwards that he forgot to recruit an assistant, making it impossible for him to see any of the morning activities. There's an opportunity for someone to volunteer next year.

Once again, both the Northern Virginia NTrak and the Potomac Module Crew ran trains on their modular layouts in the main room. Stephen Wood, MMR from our fellow Mid-Eastern Region (MER) Division 13, in Durham, NC send an email afterwards "I felt that having the two modules that were there was an outstanding touch to this event."

We had two tracks of clinics with two clinics in each track, for a total of 8 clinics covering a variety of topics related to model railroading. Stephen Wood's email included: "I

Schedule		
Time	Track 1	Track 2
9:00 AM	Layout Design Concepts for Operations: Bob Reid MMR	How to Build A Waterfall: Marshall Abrams
10:30 AM	Operations Design Concepts Illustrated: Bob Reid MMR	Electroluminescent Signs for your Layout Brian Sheron MMR
11:30 AM	Lunch & Business Meeting: Bernie Kempinski: Publishing with Kalmbach	
1:00 PM	Operating With Single Cycle Waybills: Mike White	Talk to Your Mid-Eastern Region (MER) Representatives
2:00 PM	Awards (if judging completed)	
2:30 PM	The Railroads Role in Warfare: Bernard Kempinski	Momentum and Brakes - Operating with a Tsunami: Mat Thompson
3:30 PM	Final Announcements	

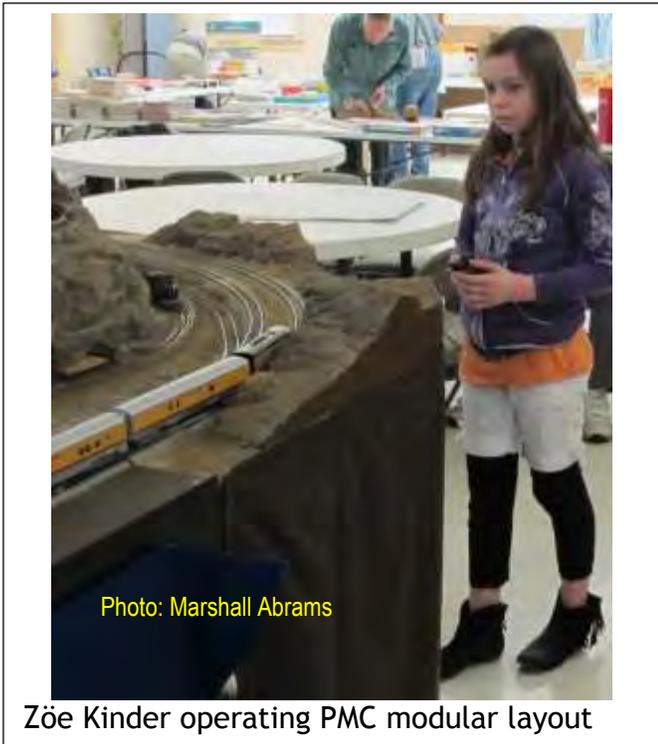


Photo: Marshall Abrams

Zoë Kinder operating PMC modular layout



Photo: Bob Reid, MMR



PMC circus-themed module owned by Deborah Shef



Operations Design Concepts Illustrated:
Bob Reid MMR

A photo tour of Bob's Allegheny and Shenandoah. A large double deck HO layout set in 1925. It features a 720' main, 150 turnouts, over 600 freight cars. It is fully scened and operated regularly by a dedicated crew of 8-12. It was designed for operations and those concepts were illustrated in the photographs and track plans presented in the clinic.

Operating With Single Cycle Waybills:
Mike White

This clinic described and explained an operating scheme for use with single-cycle waybills. Starting with the standard Setout, Hold, Pickup method in use by many, it expanded this system to encompass many different types of waybill and freight movement conditions.

The Railroad's Role in Warfare:
Bernard Kempinski

From the primitive 19th century iron horse to the thundering diesels of today, railroads have played an important part in enabling, changing, and sometimes inciting warfare. This talk was an overview of how railroads served in America's wars, and how to apply this information to design and build operating model railroads. Starting with the Crimean

want to thank you for putting on some of the best clinics I have ever seen outside a National Convention. Congratulations not only to the presenters, but your members in the Potomac Division, as well as to the people who organized this outstanding event." Clinics descriptions follow.

Layout Design Concepts for Operations:
Bob Reid MMR

How to design a layout for operations that will fit in a small space and still be operational by several people. Junctions, double decks, layouts that will fit anywhere; many many plans, lots of practical advice.

War in 1855 and extending to current times, the talk featured prototype photos, maps, and plenty of examples of world class modeling. It put special emphasis on the US military in the American Civil War, WWI, WWII and Gulf Wars.

How to Build A Waterfall: Marshall Abrams

A waterfall adds interest to your scenery. This clinic described how to make a waterfall using clear plastic packaging scrap, EnviroTex Lite epoxy resin, Aleene's Original Tacky Glue, and bristles from a nylon paintbrush. We discussed how to build up rivulets or cascades to give texture to the surface of the waterfall.

Electroluminescent Signs for your Layout:
Brian Sheron MMR

Electroluminescent (EL) signs can really enhance the realism of your layout. This clinic explained what EL signs are, how to wire and install them, and how to create and make custom EL signs.

Talk to Your Mid-Eastern Region (MER)
Representatives

Treasurer Tom Buckingham, Secretary Ken Nesper, and Director Martin Brechbiel met with a small number of PD members to discuss recent actions and plans of the Mid-Eastern Region. One discussion thread concerned divisions using hands-on technology to entice younger folks into the hobby. Increased and improved use of social media was also mentioned as a recruitment tool. Another division-focused discussion thread concerned a desire for access to experienced model railroaders to mentor "newbies." There was also a request to record clinics at regional conventions for re-broadcast so attendees can do layout tours, but still see and hear the clinics.

Momentum and Brakes - Operating with a
Tsunami: Mat Thompson

Once you have an engine with a Soundtraxx Tsunami decoder, what do you do with it? This clinic described the Configuration Variables (CV) that control momentum and braking characteristics of Soundtraxx Tsunami decoders for both diesels and steam engines. Subjects included deciding how much momentum and braking to use, helping engineers to learn momentum and braking and how to choose settings that will work with your engines that don't have Tsunami decoders. A complete configuration for movement control and sound was presented with suggestions for change to meet particular layout situations.

Clinics chair Bob Reid, MMR, wrote "This year's clinics were extremely well received with many complimentary emails telling us that you enjoyed the material we presented. Layout design, waterfall creation and bookwriting were just a few of the tasty morsels included on the schedule. However to continue this kind of quality entertainment (sounds like the PBS plug) we need your help. Next year's Minicon will be here before you know it and you CAN make a real contribution. Many modelers have areas of expertise or unusual techniques that others could benefit from. Just a few Powerpoint slides and you are ready to go. So if you are interested please let one of us know. We can be reached through the web page <http://potomac-nmra.org/>. Just click on the contact officers page."

In addition to the clinics and modular layouts, we had a contest and display room where members brought models, some for AP merit-judging and others just for display.

There was a grand total of 11 models in the Contest Room, four of which were brought for Achievement Program judging. Three modelers brought models for display; taken altogether, the number of models were a significant increase over last year.



Scratchbuilt 0-4-0 Firefighting engine by John Paganoni



Varney 1950's Old Lady by John Paganoni



Life-Like Proto 2000 USRA 0-8-0 converted to a Central Vermont P-1-a class 0-8-0 by John Paganoni



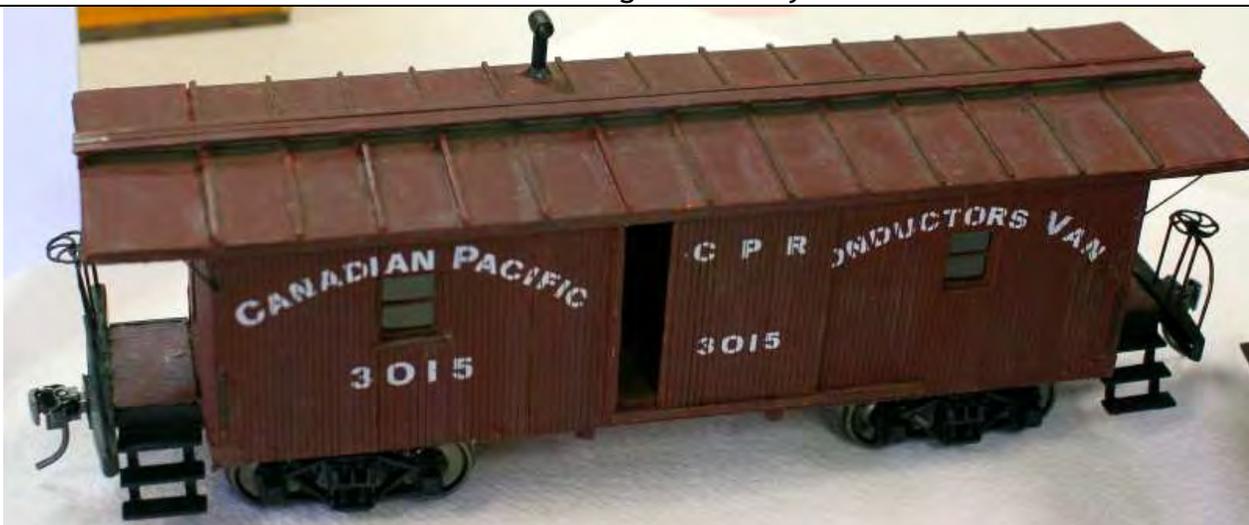
1950's Mantua Shifter by John Paganoni

The four models brought for judging were from John Paganoni and three received enough points for Merit Awards; two were expertly-detailed steam engines that each scored 112 points - a tie! The first was a Life-Like Proto 2000 USRA 0-8-0 that John converted to a Central Vermont P-1-a class 0-8-0. This was far more than a new paint job as the locomotive featured a new cab, tender, cylinders, pilots, smokebox, etc... and dozens of individual details, many of which he fabricated. The second locomotive was a scratchbuilt. Another engine of John's was a 0-4-0 that serves a firefighting locomotive on

John's free-lanced logging railroad. Like the CV switcher this model featured lots of expertly applied details. With scratch-building requirements along with a third previously judged engine, these together provide all of the requirements for John to get his AP Motive Power award. John brought a very nice Central Vermont flammable storage building that also was a Merit Award model, as well as a very well done kit with a nice scratchbuilt detailed first-floor interior of Ollie's Tavern. Congratulations to John on all of his entries!



CG&W 55 - a traction freight motor by Martin Brechbiel



CP3015 Conductor's Van restored by Martin Brechbiel



CG&W Conductor's Van scratchbuilt by Martin Brechbiel l



Jordan Spreader built by Bill Roman



Central Vermont flammable storage by John Paganoni



Ollie's Tavern by John Paganoni



Doyle's Ice House - a scratchbuilt structure by Martin Brechbiel

The other seven models were all display entries; two more steam engines from John Paganoni, a scratchbuilt structure, a traction freight motor, two conductor vans from Martin Brechbiel, and a very sharp looking Western Maryland maintenance-of-way piece of equipment from Bill Roman.

Martin Brechbiel, MER Contest Chair and Director, was assisted by Marty McGuirk and Bill Day, MMR in both judging and providing these descriptions.

White elephant sales were conducted by Clint Hyde, assisted by Jim Kinder who is expected to take over the white elephant operations next year. Clint observed that some items remained unsold. There were some great bargains that went home with their original owners. Some items were donated; their proceeds were retained by PD. The PD did not take any commission on any other items.

Breakfast and lunch were sold by the Girl Scouts.

At the lunch-time PD Business Meeting for the Board of Directors were elected by acclimation from the slate nominated by the nominating committee of Bob Reid, MMR and Mike White. The Directors subsequently selected the officers from among their number, as specified in the by-laws. See the masthead for the officers and committee chairs.

Following the election, Bernie Kempinski told us what it is like publishing with Kalmbach. The Business Meeting ended with drawings for door prizes!

In addition to all of the activities described above, the Minicon gave us a chance to see old friends, renew old acquaintances, and meet new friends with model railroading interests.

The volunteers who made the Minicon possible were:

Minicon Committee	
Chairman & Floor Manager	Tom Brodrick
Registration	Mike White
Clinic Coordinator	Robert Reid, MMR
Modular Layout Coordinator	Phil Scruggs
Contest & Display Coordinator	Brian Sheron, MMR
Photographer	Robert Reid, MMR
White Elephant Coordinator	Clint Hyde
Technology Coordinator	Marshall Abrams

Tom Brodrick, Minicon Chair and Floor Manager, observed that having a luncheon speaker was an excellent idea. Bernie set a high benchmark. The 2 modular groups were on time setting up, breaking down and were very careful with the church property. We should get some more help setting up and replacing things at the end so the work would go easier. **I**

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Model Railroads Go To War: A Book Review

by Mat Thompson

Bernard Kempinski's newest book, *Model Railroads Go to War* (www.KalmbachBooks.com, \$19.95) is an intriguing look at modeling possibilities seldom pursued by either model railroaders or military modelers.

I know Bernie and had access to the blog he used to assemble material and test ideas so I knew the book was coming and never doubted it would be as interesting a work as it is. His in-depth research, museum quality modeling and input from European military model railroaders present a one-of-a-kind book filled with new concepts.

The story starts with the Crimea War in Russia, moves to our Civil War, proceeds chronologically to Desert Storm and finishes with the Kennedy Space Center Railroad. In between are chapters on WWI railroads and WWII railroads in both the U.S and France.

The text tells the story well, but let's be honest. We are all model railroaders and know text is just a way to keep the pictures separated. It's the pictures we came for and they are worth the price. Looking through a WWII chapter, I realized the way to tell the difference between the model photographs and the real thing is the model photos are in color. Bernie has found Civil War modelers and WWI modelers who work deserves the wider audience this book will give them.

One reason the book is so interesting is Bernie's own modeling. McCook's Landing is a freelanced, Civil War based O scale diorama Bernie built and has taken to many conventions for the attendees to operate. It

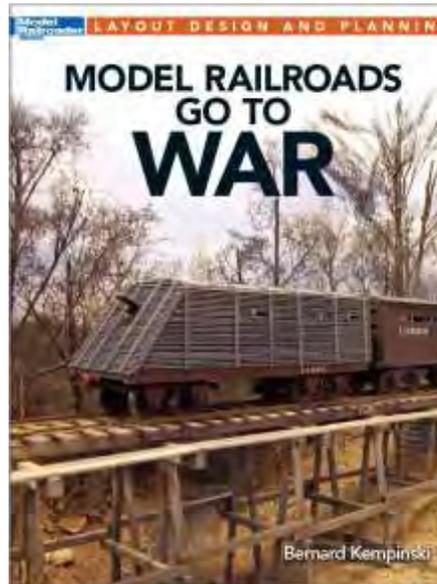
showcases both fine modeling opportunities and the realistic operations. The Battle of Cambrai features 24-inch gauge and 12-inch gauge railroads moving ammunition and supplies in the scarred terrain of WWI's trench warfare. He also modeled several rail guns and the armored cars on the book's cover photo.

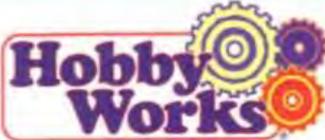
There are seven track plans. The largest is the USMRR Aquia Line, on O scale layout with an overall size of 30 by 32 feet. The other six layouts are spare room size. Explanation of each covers both the modeling concept and the operating scheme for the layout. The present era Foot Hood Railhead would apply equally to Fort Stewart in Georgia, Fort Bragg in North Carolina and Fort Lewis in Washington.

Even if you aren't planning to model a military railroad, there is useful information for almost any layout. In a Civil War sidebar, Bernie details how to convert commercial figures to meet specific modeling needs. Another sidebar shows how to tie down WWII military vehicle flatcar loads. These were common in the '40s, through the Korean War era of the '50s and into the early '60s taking National Guard units to their annual training periods.

Model railroaders, military modelers and history buffs will all find much of interest in this book. . **I**

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Mechanical Repair of A Digitrax UT1 Throttle

by Marshall Abrams

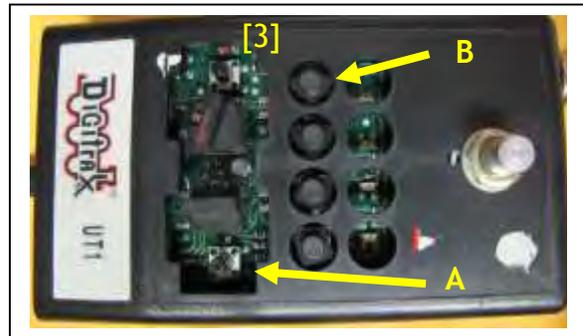
This is a short report on opening up a Digitrax UT-1 throttle [Figure 1] and performing mechanical repair.



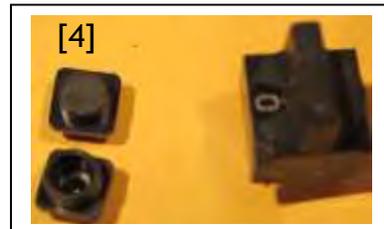
Digitrax no longer repairs the UT-1 due to parts unavailability, so I had nothing to lose by trying to repair a mechanical problem where some of the push button had receded inside the case so far that they couldn't be pushed.

The hardest part was figuring out how to disassemble the UT1. I searched the Internet and couldn't find any instructions or diagrams, so I applied a little brute force and, fortunately, didn't break anything.

The face plate is glued on. I removed the face plate, but on reflection that wasn't necessary for my problem. In case it is necessary for your problem, remove the speed control knob using a hex wrench and gently pry up the face plate [2].

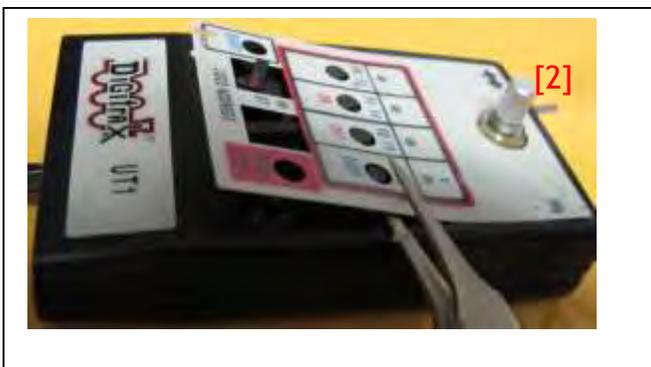
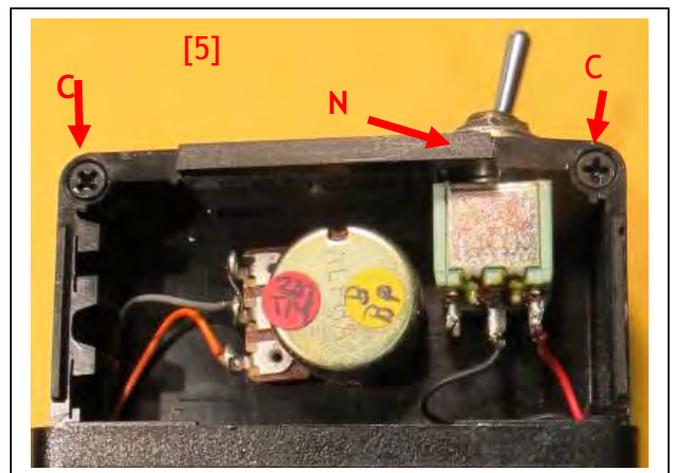


As pointed out in [3], there are push buttons on the circuit board (A) and caps (B) that sit on these and protrude through the face plate. Be careful not to lose any.



The caps and rotary numeric selectors are shown in [4].

To open the case [5], start by sliding off the cover behind the speed control knob remove the nut (N) that holds the directional switch (but don't remove the switch), and unscrew two screws in the corners (C).



Next [6], the top and bottom halves have to be slid and then lifted apart.

Figure 7 is a side view of the circuit board with the cover removed. The circuit board is secured in place with spacers (S) and caps (K) on posts (P). Some of the caps came loose and then disappeared, along with spacers. This allowed the circuit board to sag. Be careful that more caps don't disappear. Note also the inverted L-shaped tab (T) that holds the top and bottom halves of the case together.

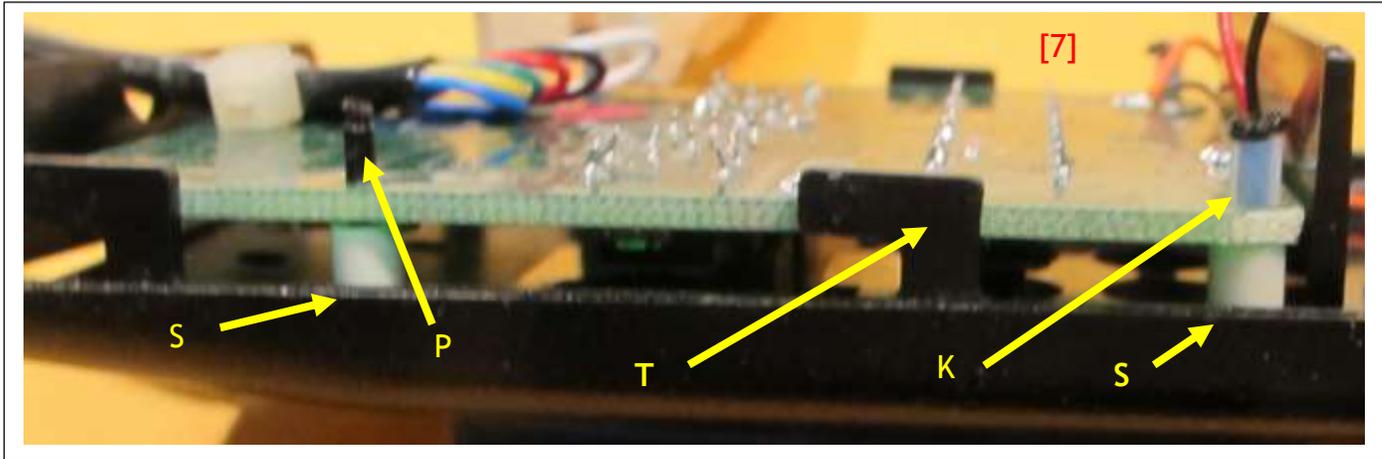
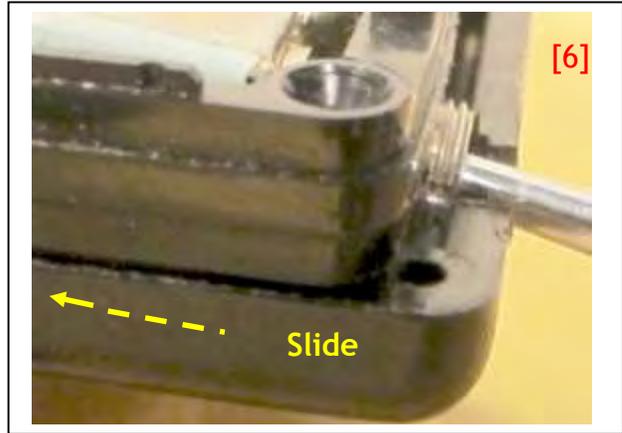


Figure 8 shows the depression (D) in the top of the case into which the tab (T) slides.



I glued the circuit board in place and reassembled the UT-1. It worked when I plugged it in. Repair complete. **I**

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Not getting the bi-monthly NMRA eBULLETIN?

The new **NMRA eBulletin** comes out every other month near the 1st of the month. Either your SPAM filter is blocking it, or you need to update your email address with us. Go to <http://www.nmra.org/member/content/member-info-update>

Operations Initiative Report

The monthly operations program, similar to the monthly open houses, continues to provide an opportunity for division members to experience operations as practiced on layouts around the division.

Saturday, January 31

**Rich Steinmann's Erie Lackawanna,
Morris and Essex Division**

Wayland Moore writes that Glen Downing, Martin Brechbiel, Ross Kudlick, and Alban Thiery had the good fortune to see and operate on Rich Steinmann's Erie Lackawanna, Morris and Essex Division, layout 31 January, 2015. Rich models the portion between Chatham and Port Morris Jct. and works to a schedule Washington to Hoboken. The early beginnings of the layout go back 25 years and reflect the layout design of that time, one or a few operators standing in the middle with the tracks going around the room. In these early beginnings Rich made some beautiful scratch built buildings typical of the local, some being exact models of specific buildings with beautiful trackwork. He then discovered operation and with the kids moving out, he got more "acreage" in which to build and now has a great layout for operation with some great

enjoyed by all. There was a yardmaster at the main yard and other crews ran several freight, through passenger and commuter trains over the entire line fed by the double



Operations

ended staging yard.

Rich provided additional interest and variety with the Morristown and Eastern shortline connection being worked by a two man crew, another two man crew worked a local and the other shortline connection at Wharton. The shortline at Wharton is the Mount Hope Mineral RR which connects with the CNJ High Bridge Branch on the hill in Wharton. Car cards and waybills provided the necessary information for the crews switching the freight cars. In key places were track diagrams and other information handy for the crews to better accomplish their tasks. With the use of "virtual" signals, a well thought out operating scheme and easy to read and follow "paperwork", the session made for "gentle" and rewarding challenges. Rich's easy going approach, realistic and prototype based layout made for a really great time for the visitors. One item that helped add to the pleasure was good trackwork and equipment with no significant electrical or mechanical issues.

Unique to this session was a CSX engineer who could get the job done without the normal issues with management or union. Rich's unique methods to add track will be the subject of an upcoming article in the Layout Design Sig publication



Rich Steinmann explains his operations

scenery.

His printed schedule was the basis for this operating session, "loosely enforced" so crews new to operation would not feel "under the gun" which made for a operating session

Saturday, March 14th, 2015
Dale Latham's Piedmont Southern

Dale Latham wrote about his operations initiative session. Saturday's session seemed to go by OK with little to no electrical or mechanical failures. Everyone seemed to have enjoyed themselves, although at times the task at hand seemed overwhelming. The three guest operators ran the various local turns (Herb Bigel on the Hanover Turn, Paul Hutchins on the Shenandoah turn and Dave Beckstein on the Piedmont turn). The session ended as all three returned their locals to the division point yard. Thanks to Bill Miller, Bill Roman and Mike White for their assistance during the session.



If you've never participated in an operating session, these are excellent opportunities for you to try your hand at it. If you'd like to participate, or have questions, E-mail Bill Mosteller (wsm@greatdecals.com). You can register for an upcoming session by sending a check for \$5 made out to Potomac Division, NMRA to Bill Mosteller, 3306 ParksideTerr, Fairfax, VA 22031-2715. The nominal fee helps to defray incidental costs with carrying out this initiative.

Coming Saturday, June 6th, 2015
Mat Thompson's Oregon Coast Railroad

Mat can accommodate 12 people. Session hours are 1:00 PM to 4:00 PM. If you have a Digitrax throttle, feel free to bring it.



Location is 16.5 miles west of the Dulles Expo Center, just off I66. The layout is not handicapped accessible.

Layout information:

The HO scale Oregon Coast Railroad, set in 1956, follows the Columbia River from Portland to Astoria and then south along the Pacific Ocean to Tillamook. Modeled activities include an ocean port with a tramp steamer and car float, a large yard and engine facility, a large meatpacking plant, a riverside fishing town and a large lumber mill. The layout fills a 36' by 32' room in a folded dog bone configuration plus a 40' x 2' extension in a second room. Scenery is 90% complete with several water features and hundreds of trees. The control system is Radio Digitrax. Operations are conducted using Time Table/Train Order procedures. Engines are a mix of steam and diesel and all are sound equipped. The layout was featured in Great Model Railroads 2014. The web site is <http://ocrrnet.ipage.com>.

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Layout Open House Report Stan Knotts' Royal Oak and Southern

by Bob Rosenberg

A TRIP BACK IN TIME

After two successive postponements because of our exceptional Washington weather, I finally made it up to see Stan Knotts' HO scale Royal Oak and Southern Railroad in Laytonsville, MD, and a very well done railroad it is.



Representing a free lanced model with no particular prototype in mind, it fills a 17 foot by 25 foot basement room and is composed of a continuously operating two level standard gauge line with a duck under stone arch bridge over the main entrance aisle, and a narrow gauge subsidiary that winds around a mountain in the middle of the room to a timber/logging area at the top. A 10 foot by 12 foot extension is under construction in an adjacent room that also doubles as a work shop. The layout is operated with NCE DCC radio controls; some of the locomotives are currently equipped with sound, and eventually all of them will be. The turnouts are operated by DCC stationary decoders powering Tortoise or Switch Master switch machines, and all turnout control panels have been removed. The scenery is traditional Hydrocal and Sculptamold over a cardboard substructure with much of it carved out as rocks.

Stan began building the railroad in the early 1990's but, like so many model railroaders, didn't really get rolling on it until he retired. Although not intended to be an explicit era or location, the general concept reflects the

heavily industrialized area of Western Pennsylvania in the late 1930's; locomotives are strictly steam of varied sizes (not a diesel in sight), the largest one being a USRA Heavy 2-8-2; the rolling stock is from the same time frame – truss rod box cars and billboard reefers (I could write a whole Ancient Modeler article using his railroad equipment alone), and while no specific towns are identified, Uniontown seems to be more prominently mentioned in the signage on the buildings than any other. Many of the industries are named for friends and family, something it would seem that we all enjoy doing. There are audio CD's from a company called Fantastonic Engineering installed in various places under the layout to provide industry appropriate sound effects, and a couple of those Miller Engineering lighted and animated signs around as well. He even went so far as to start up a Railroad Industry SIG which he managed for 20 years

Every modeler has their "thing" (the part of the hobby they like to do best) and Stan's is building structures – lots of them – in various shapes and sizes that include kits, kit bashed,

scratch built, anything that meets a need on the railroad, all of which are weathered to some degree. The primary rationale for the new extension is to provide additional building sites for more structures, having run out of room for them in the original section. There are even some structures from his father's Troll and Elfin Railroad, which some of us old timers can remember from before there was a Potomac Division, that he recycled for their sentimental value. The entire railroad and its scenery are as finished as a railroad can get, and the whole thing appears to me to have an "industrial cast" about it; I would describe it as a vague sort of soft gray layer of coal dust, or soot over everything. If this is the weathering he referred to, it's very effectively done, and

the somewhat subdued layout overhead lighting, which some might feel could be a bit brighter, actually enhances the illusion even more.

Stan Knotts is one of those modelers with a sharp eye for details as well as the ability to pick up on the little things and apply them to his railroad. Examples of this are everywhere: The small steam powered boat in the sawmill pond to round up the logs for cutting and stacking; the old fashion single strand steel cable guard rail along the side of a road; the canal in the ("Uniontown," maybe?) section with its model lock at the end; the employment of period trucks (mostly Mack's by Jordan Miniatures) for shipping everything that doesn't travel by rail; the light gray atmosphere that permeates the entire layout;

small features that may not seem that significant by themselves, but when you put them all together they create the impression that you really are in Western Pennsylvania, albeit in a 1:87 scale version of it, just before the onset of WW2. It's one of those talents that are nowhere near as easy to implement as they often appear to be, not unlike playing the cello.

I

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Layout Open House—Ed Maldonado's Colorado & Maryland

When: Saturday, May 16, 2015, 1:00-4:00 pm

A large fully scened HO scale basement layout. Trackplan is a large modified folded dog bone, with a three track 150' mainline. Gentle large radius curves. Incorporated into the layout is a large pull thru yard. Called the Colorado & Maryland, featuring mostly Western Maryland, B&O, CSX. Other railroads occasionally sighted are Conrail, NYC, BN, DR&G and Southern/NS. Digitrax DCC controlled. Layout and trains have sound.



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