

The POTOMAC FLYER

Bernie Halloran's The New York, Kittaninny, and Western



Photo: Bob Reid

Robert Reid's Allegheny and Shenandoah Railroad



Photo: David Arday

In This Issue: Business Car • Finally, You Are the Engineer! • Achievement Program • Dispatcher Panels • Freight Cars of the 1950's and 60's • 3D Printing • Meet Shannon Crabtree • Hanford Produce Company Company Cars • Hub City Highlights • PD_NMRA • Operations Initiative • Layout Open House: Reports: Bernie Halloran's New York, Kittaninny, and Western & Robert Reid's Allegheny and Shenandoah Railroad—Coming: Royal Oak and Southern by Stan Knotts & PRR Nassau Division by John Sethian

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Tip: All of the entries in the Bill Of Lading are links. Point to an entry and click to jump to that article.

Minicon Scheduled !
Saturday, March 28, 2015

Potomac Flyer

Potomac Division's Quarterly Newsletter

Submission Deadlines

Winter Issue December 1	Spring Issue March 1
Summer Issue June 1	Fall Issue September 1

On the cover:

Bernie Halloran's The New York, Kittaninny, and Western photo: Bob Reid
 Robert Reid's Allegheny and Shenandoah Railroad photo: David Arday

From the Business Car

by Brian Sheron, MMR, Division Superintendent

In my last column, I said that the Board was starting to look for a place to hold the upcoming 2015 Potomac Division Minicon. I also mentioned that in the past, we have tried to alternate locations so one year it is in Northern Virginia and the next year it is Maryland. Unfortunately, the church in Columbia that we used for the 2012 Minicon is no longer allowing the facility to be used by outside groups. Marshall Abrams, our Senior Assistant Superintendent, put out a call to see if anyone was aware of available facilities in Montgomery or Howard Counties. Many of you responded with good suggestions, and we tried to follow up on all of them. In some instances, we tried to contact the facility but never received a response. In other instances, the facility did not have the space we needed, or the cost to rent the facility was too high.



Switching subjects, one of the objectives of the Division is to promote the model railroading hobby. At the last Board meeting, we discussed if there were any organizations we could financially support with a donation that met this objective. Phil Scruggs suggested that the Friends of Fairfax Station Museum were planning on building an outdoor model railroad at the museum. The Board voted unanimously to donate \$500 to this organization to be used for the purchase of engines, rolling stock, and/or track.

Lastly, over the years, the Board has tried to offer a variety of model railroading-related activities to the Division. The ones that seem to be most popular are the monthly layout tour/open houses, and the Spring Minicon. We have tried other activities, such as "White Flag Extras", which were clinics held on Saturdays. These took a lot of work to arrange, but did not attract a large turnout. More recently, we have started offering monthly operating sessions on member's layouts. So far, these are meeting with (what I would call) mixed success. The point I am trying to make, is that we need to hear from all of the members what additional activities they would like to see. If you have any good suggestions or ideas, please feel free to call me at 301-349-5754 or send me an e-mail at BWSheron@mac.com. **I**

As a result, we have decided it was best to see if we could return to St. Matthew's Church in Annandale, Virginia, where we held the 2014 Minicon. We have recently learned that our application to use the facility has been accepted. The 2015 Minicon is now scheduled to be held in St. Matthews Church in Annandale on Saturday, March 28th. While we always invite and welcome NMRA members from other Divisions, I doubt we will be able to have a joint Minicon with the Chesapeake Division as originally planned.

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Mark me up! Finally, You Are the Engineer!



The first "Mark Me Up" column described what you could expect at an operating session. In the next column, you were encouraged to try operations by dispelling some common misunderstandings. The last column identified

by Mat Thompson

resources to help you understand a bit more about operations.

So finally, it's time to run a train. You've walked the railroad. The host has briefed. You're paired up with an experienced operator who will be the conductor. You are the engineer, throttle in hand, ready to go.

Every railroad is different so be flexible, but the following list will help you get into the role and work with the conductor to do the things a train crew does:

- Acquire your engine. Gently roll the throttle up to see how the engine responds, ring the bell and blow the whistle.
- Check for brakes. Many decoders support braking effects, and you will want to get a feel for how your engine reacts.
- Perform a Yard Count. Make a physical inventory of cars and match the cars to your car cards or switch list.
- Inspect your train. Look for obvious problems like derailed cars and see how the cars are blocked.
- Plan your work. Talk with the conductor to understand your train instructions, clearance, orders and your place in the schedule.
- Consider other traffic. Locate passing sidings and plan meets.
- Watch for and obey Right of Way controls. Pay attention to Yard Limits (15 mph or less), speed limits and signals if they are present.
- Use your headlight. It should be on when you are moving and off when you are off the mainline and stopped; keeping it on and off at the right time is the engineer's job.
- Use the bell and the horn. Blow the horn for road crossings, ring the bell at stations.
- OS stations. Report to the dispatcher or operator when you pass or stop at and depart stations.



Tom Potthast and Wayland Moore are switching an industrial area on Pete LaGuardia's New York Central Western Illinois Division. Two person switching crews are common even with experienced operators. The conductor plans the switching moves while the engineer runs the motive power - just like on a prototype railroad.

Got the idea? You are a busy fellow with lots to do.

Two final points -

- Run slow
- Have fun

In the next column, we'll consider how being an operator can help your modeling. **I**

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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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**

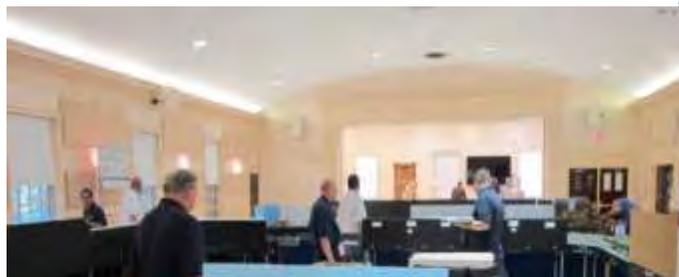
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Minicon Scheduled !

**St. Matthews Church in Annandale
Saturday, March 28, 2015**

• Clinics • Contests • Modular Layouts

- Mark your calendar
- Plan to be there



• White elephant

Designing Dispatcher Panels in JMRI

by Robert B. Rodriguez



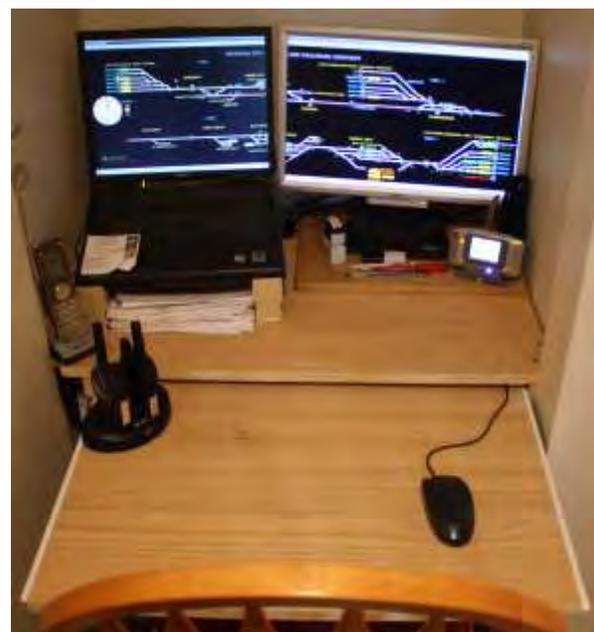
You have your Digital Command Control (DCC) layout up and running and want to host an operations session. Or maybe you just want a way to control everything on your layout from

one location without stringing miles of wires and installing a large number of switches and relays. A software program called Java Model Railroad Interface (JMRI) maybe just the ticket to do this.

JMRI, as their website explains, is an “open-source project for developers to write software for model railroads....with more than three hundred people writing parts, and users on every continent except Antarctica”. The software runs on Windows, Mac OS, and Linux computers. The program can be downloaded free of charge from the JMRI website at: <http://jmri.sourceforge.net/>.

JMRI is a suite which includes programs to easily program your DCC locomotive and maintain those settings in a locomotive roster using DecoderPro®; build control panels, including signaling, and operations as well as control your layout using PanelPro®. It also has the ability to automate layout devices and even room lighting using JMRI Logix. One of the latest added components is JMRI Operations which lets you create manifests to route cars over your railroad from shipper to receiver, and provide train crews with operating instructions.

This article will focus on the basic elements of PanelPro® and how I used it to build my dispatcher panel for my railroad, The Nickel City Line. Before you even get started, you must have a computer and a means to connect the computer to your DCC Command Station. JMRI will work with over 30 DCC systems. Under ‘Hardware Support’ on the JMRI webpage you can find the recommended computer connection that will work for your system and computer. I actually use two computers; a laptop and a PC to run panels at the Dispatcher Office and the



Dispatcher's Office on the Nickel City Line Railroad

Yardmaster Office. Both are older computers running Windows XP. They don't need to have a lot of computer speed, but they should be dedicated to the layout so they are not running other programs in the background. Both of mine are surplus computers that friends were getting rid of when they upgraded. I simply wiped the hard disks and reinstalled the operating system, drivers and JMRI. Now they are dedicated to the railroad. Since my layout is powered by Digitrax, I use the Locobuffer USB from RR-CirKits (<http://www.rr-cirkits.com/>). The device connects to a USB slot on the computer. A Loconet cable runs from the Locobuffer to the command station. After setting up the Locobuffer on the computer and in the JMRI software you are ready to start using JMRI.

For the computer to communicate with devices on your layout such as turnouts; and for it to see where trains are on the railroad; the layout must be equipped with stationary decoders that can do these functions. On my railroad I use Digitrax® BDL-162s (now replaced by the BDL-168) for block detection of trains and I use Digirax® SE-8c's for turnout

control and signaling. My layout is gapped for 32 blocks, 40 turnouts, and control of 160 signal heads. Once the hardware is up and running it is time to play with PanelPro® and build the dispatcher panel.

Even before you start using PanelPro® you should draw out your layout on paper. See Fig. 1. A simple linear drawing will do well. Identify all the turnout numbers and block detection sections. This will aid greatly as you start to draw the panel on the computer. Below is a drawing for the panel I will use for this article.

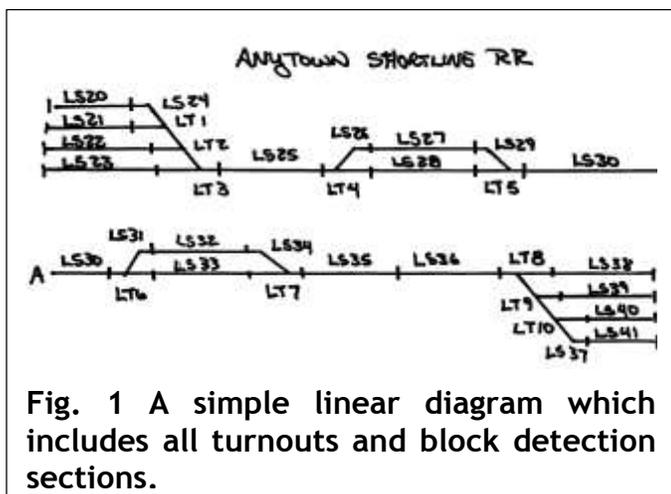


Fig. 1 A simple linear diagram which includes all turnouts and block detection sections.

The Anytown Shortline is a simple East to West route with two passing tracks and staging yards on each end of the railroad. I have elected to use turnout numbers 1 to 10 and block detection sensors 20 through 41. On your own railroad these numbers will vary depending on how you set up your system, but here we will keep it simple.

Open PanelPro®, select 'New Panel' from the drop down menu and open the Control Panel Editor. See Fig. 2. Name the panel first and save it so you can find it later if you have to stop before all the elements are drawn. I named my panel Test Panel which now displays the name on the top ribbon of the window. The default background color is light gray. I changed it to black because it makes things much easier to read when using track occupancy indicator icons.



Fig. 2 JMRI opening screen.

The next step is to populate the tables for turnouts and sensors. I started with turnouts first. Click on the 'Add Items' selection at the top of the panel and select 'Item Table List'. On the right hand side is a list of tables used by JMRI. Select 'Turnouts'. The table will be blank. Select the 'Add' button at the bottom of the table. A new window will open to add a turnout. I added 10 turnouts quickly by checking the 'Add a Range' box and entering '10' in the 'Number to Add' box. Loconet should already be selected for the System window if you are running Digitrax®, otherwise it will display the DCC system you selected for your own DCC system when you installed the program. I entered '1' in Hardware Address window because that is the lowest numbered turnout I am using in this example. Hit the 'OK' button and now you will see 10 turnouts in the table labeled LT1 through LT10. See Fig. 3. The LT stands for Loconet Turnout. If you using a different DCC

User Name	Cmd	Connect	Device	loaded
LT1	Unknown		Device	<input checked="" type="checkbox"/>
LT2	Closed		Device	<input type="checkbox"/>
LT3	Unknown		Device	<input type="checkbox"/>
LT4	Closed		Device	<input type="checkbox"/>
LT5	Unknown		Device	<input type="checkbox"/>
LT6	Closed		Device	<input type="checkbox"/>
LT7	Unknown		Device	<input type="checkbox"/>
LT8	Unknown		Device	<input type="checkbox"/>
LT9	Unknown		Device	<input type="checkbox"/>
LT10	Unknown		Device	<input type="checkbox"/>

Fig. 3 JMRI Turnout Table.

system you will see a different letter in front of the T.

Now I will add 21 block detection sensors. Click on 'Sensors' in the right hand column and the Sensors table opens and it is populated with one item labeled 'ISCLOCKRUNNING'. This is an internal sensor to run the Fastclock feature in JMRI which I will not touch on here. Again, click the 'Add' button at the bottom of the table. Check the



Fig. 4 Adding a range of sensors in JMRI.

'Add a Range' box and enter '21' in the 'Number to Add' box. See Fig. 4. Again, Loconet should already be selected for the System window if you are running Digitrax. I entered '20' in Hardware Address window because that is the lowest numbered sensor I am using in this example.

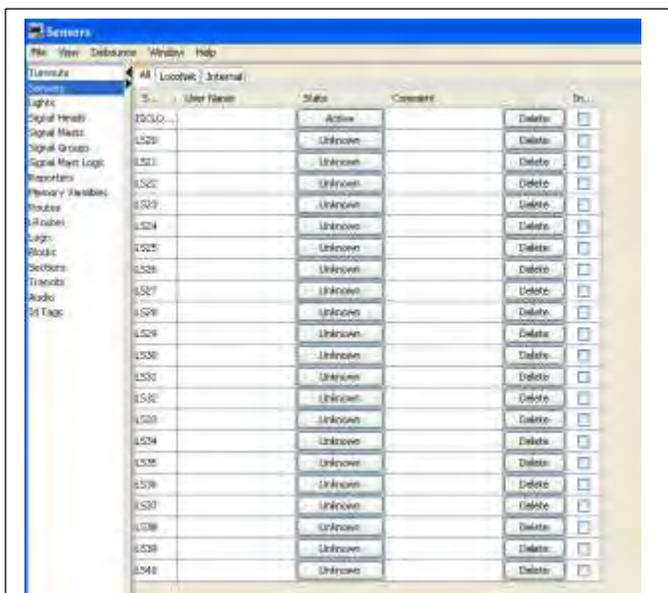


Fig. 5 A range of Loconet Sensors in the Sensor Table.

Hit the 'OK' button and now you will see 21 sensors in the table labeled LS20 through LS41. See Fig. 5. With the Turnout and Sensor tables populated I can go to work drawing my panel.

I will start my panel by adding the first turnout, LT1. From the menu at the top of the panel I select 'Add Items' and then select 'Item Palette'. With the Item Palette window open, I selected the 'Indicator Turnout' tab. In the Indicator Turnout window I'll click on the 'USS-Right Turnout' button. In the box on the screen will appear a turnout in all white. This will be the graphic I use for LT1. Click on LT1 from the table list in the window which will highlight the row in blue. See Fig. 6. Since the turnout is also wired into a detection sensor, refer to the drawing in Fig. 1 and see the associated sensor is LS24. Enter LS24 into the 'Occupancy Circuit' window.

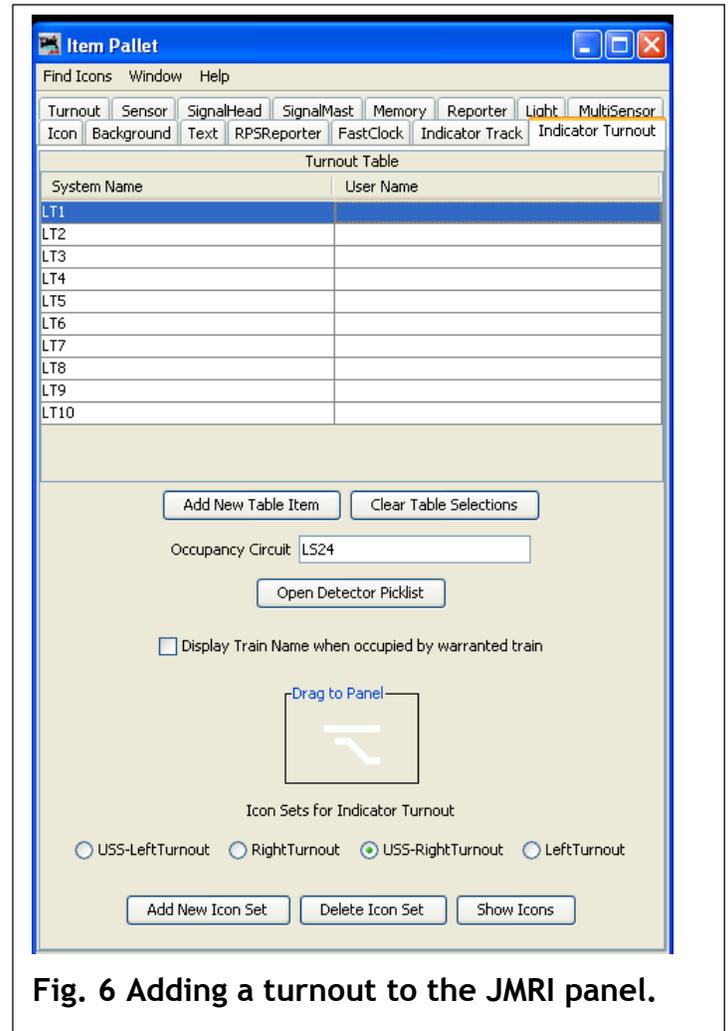


Fig. 6 Adding a turnout to the JMRI panel.

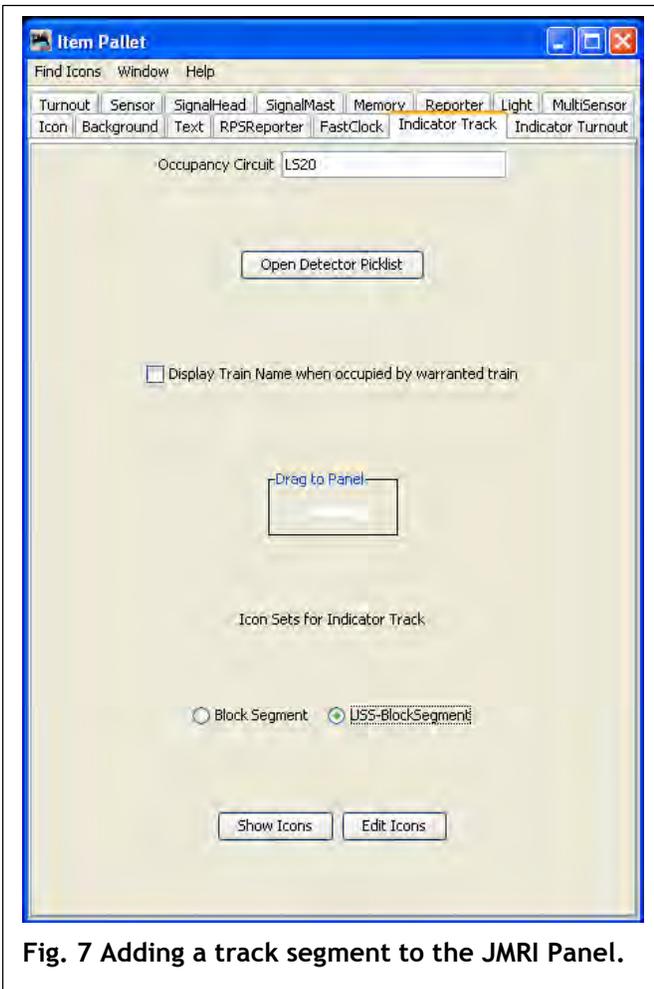


Fig. 7 Adding a track segment to the JMRI Panel.

Now simply click on the graphic in the box and drag it onto the panel. The turnout is not oriented correctly so right-click on it with the mouse and then select 'Rotate' and rotate the turnout 180 degrees. Now drag the turnout to where you want to place it on the panel. Repeat this process for turnouts LT2 and LT3. Since both of these turnouts are on the same detection circuit you only have to highlight the associated turnout in the table and then drag the icon(s) onto the panel. Now position the turnouts so they are just touching each other as shown in Fig. 1.

The next step is to add the track. Click on the 'Indicator Track' tab which opens a new window. Now add track that is wired to occupancy sensor LS20. Refer to Fig. 1 to see where that track is. Now enter 'LS20' in the 'Occupancy Circuit' window and click on the 'USS-BlockSegment' button and a white line shows up as the graphic. Drag the line onto

the panel and connect it to the upper track connection of LT1. See Fig. 7.

The line needs to be longer so click on the line and select "Duplicate". A copy of the line appears over the first which can be dragged over and connect to the first line to make it longer. Repeat this process until you have the track protected by LS20 as long as needed. Repeat the process to add and duplicate tracks for LS21 through LS25, each time making sure the line you are adding corresponds to the right detection sensor in Fig. 1. When finished the panel will look like the one in Fig. 8.

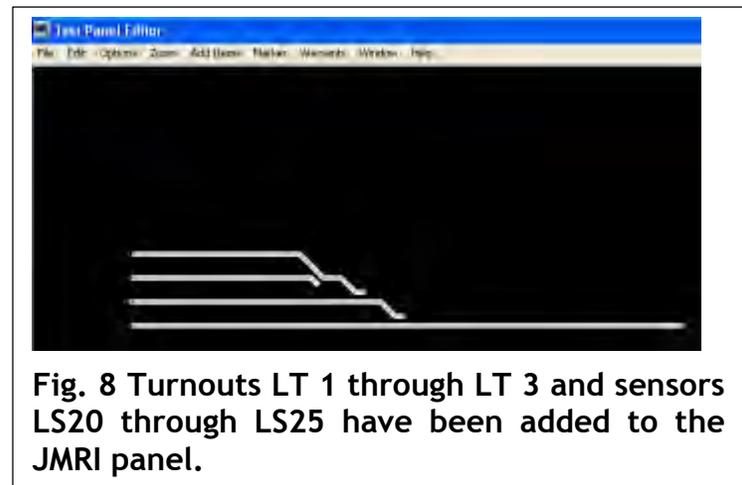


Fig. 8 Turnouts LT 1 through LT 3 and sensors LS20 through LS25 have been added to the JMRI panel.

Now add LT4, remembering that this is a left-hand turnout so you will need to click on the 'USS-LeftTurnout' and this turnout is protected by occupancy detector LS26. Add tracks for LS27 and LS28. Once added you will need to lengthen these track sections. Speed up the process by left clicking on LS27, holding the Ctrl button and then clicking on LS28. Both tracks are highlighted by yellow rectangles. Now right click on either section and the pop up menu appears where you will select 'Duplicate'. Now drag the duplicates of the two tracks and join them to the first sections. Do this several more times. Then repeat the process grouping multiple sections of parallel tracks using the Ctrl key and then duplicating the group. This greatly speeds up the process. See Fig. 9.

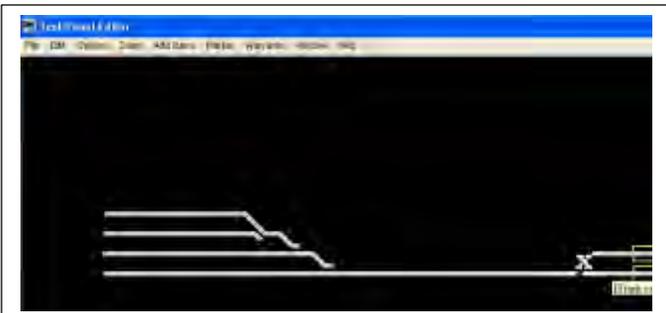


Fig. 9. Track sections LS27 and LS28 are highlighted. Duplicating them as a group makes it easier to draw long segments of the same track sections on the panel.

Repeat all of the above for turnouts LT5 through LT10 and detection sensors LS29 through LS41 to complete the panel. Because the layout is longer than the screen, draw it on two rows, using track protected by sensor LS30 as the connection between the rows. When finished the panel will look like Fig. 10.

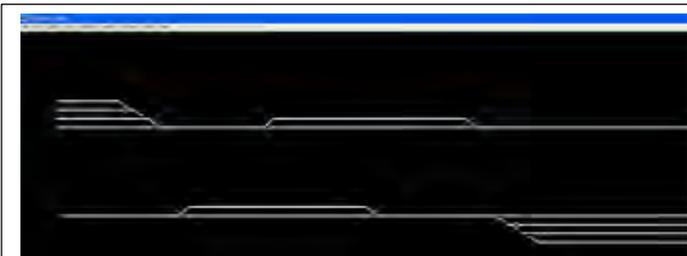


Fig. 10 The completed panel with all turnouts and block detection (sensors) sections.

Add some text for the turnouts, tracks, towns and the railroad name by selecting the 'Text' tab in the Item Palette. Type the text you want in the text window and hit 'Enter'. The text will appear in the display window at the bottom. Now you can change the font size, color and style of the text. Simply drag it from the Item Palette onto the panel and place it where you want it. When finished the panel looks like Fig. 11.

Add two small industries, Mr. Hooper's Store and Dirty Old Coal Mine, which are accessed by track sidings controlled by ground throws. Since these have no motorized turnouts or detection sensors use graphics from the 'Icon' tab in the Item Palette. To be consistent you need to change the default icon so click on the 'Icon Catalog' button and select the directory that has the icons you want to use. In my case the icons were located in C:\Program Files\JMRI\resources\icons\USS. JMRI points you in the right direction so all you need to do is browse the directories to find what you want to use. Use a non-indicating turnout and track segment. Open the track files and simply drag the icon you want onto the panel and place it where it is needed. Now the panel is complete and ready for a test run. See Fig. 12.



Fig. 11 The JMRI panel with labels.



Fig. 12 The completed JMRI panel.

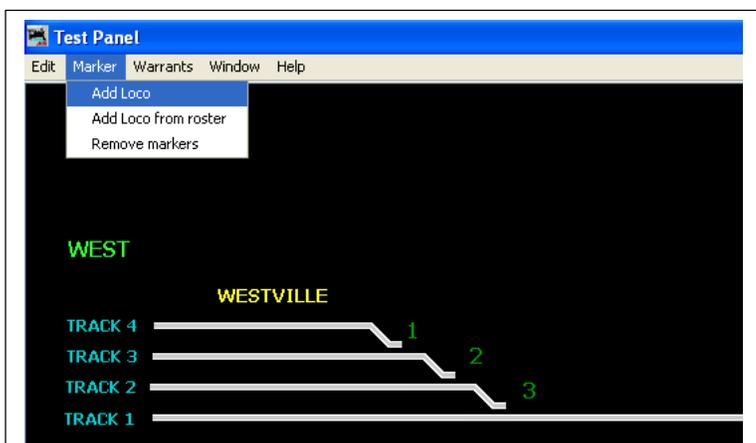


Fig. 13 Adding Train Markers to the JMRI Panel.

marker color from white to red and placed the markers on each end of the layout. Place actual locomotives on the layout in the associated sections which activate the blocks and change the icons on the panel from white to yellow (on my Nickel City panel I modified the icons to display red when occupied since it is easier to see than the default color yellow.) Click on the turnouts to set the route for each train then start the trains on their runs. As they progress across the railroad the occupancy sensors in one or more blocks will activate to tell the dispatcher where the train is. As a train clears each block the color of the block changes back to white, indicating no presence of a train. See Fig. 14 through Fig. 17.

I added two trains, numbers 17W and 18E, by going to the 'Marker' menu and clicking 'Select Loco'. See Fig. 13. I changed the



Fig. 14 - Train 18E is on Track 4 in Westville and has activated sensor LS20 which turns yellow. Train 17W is on Track 3 in Easton and has activated sensor LS40.



Fig. 15 As Train 18E departs Westville it passes into sensor LS24 which protects turnouts LT1 through LT3. Track 4 (LS20) and turnouts LT1 through LT 3 are yellow indicating a train is in those blocks.

In order for the panel to work properly each piece of rolling stock should have one resistor wheel set installed on the car. Passenger cars with interior lighting do not need resistor wheel sets.

There is much, much more that JMRI can do beyond what I discuss in this article. For example, my Dispatcher Panel on the Nickel City Line includes a fastclock, signals controlled by JMRI Logix, and sound



Fig. 16 As both trains progress across the railroad they trip occupancy detectors in each area they are present. As they leave an occupancy block it returns to the color white stating the block is clear. Note that Train 17W is in sensor block LS30 which is yellow on both the upper and lower rows in the panel diagram.

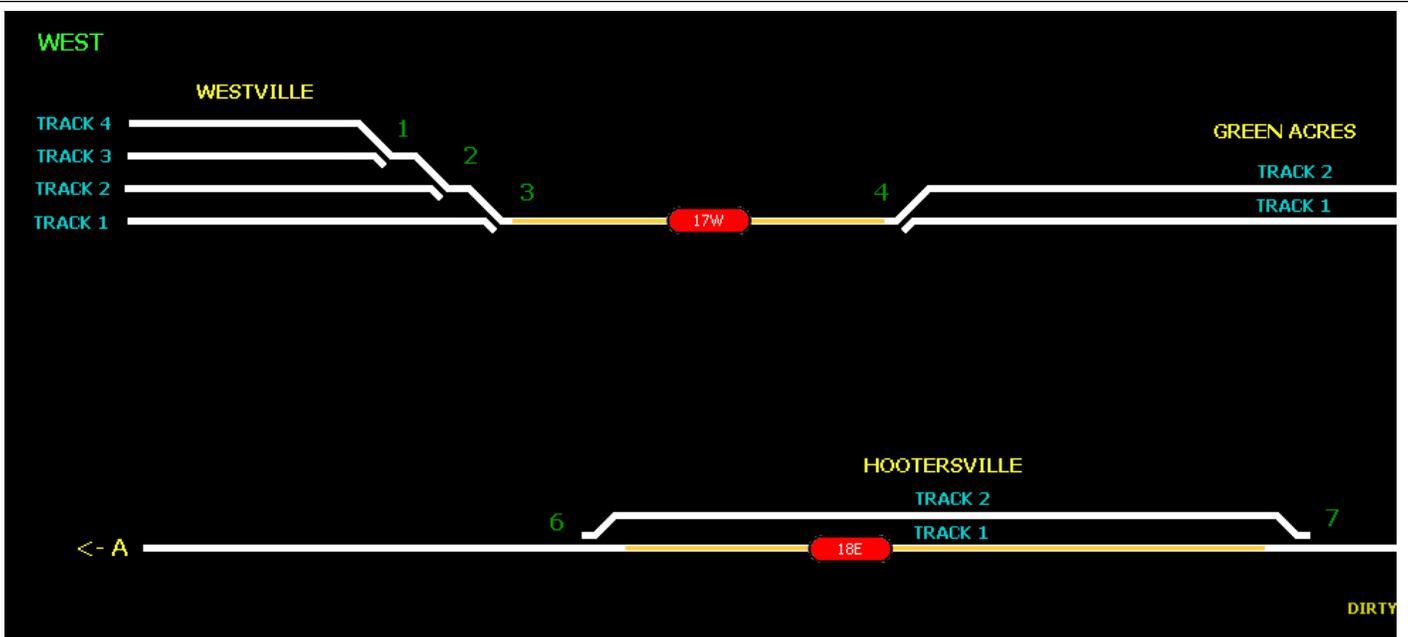


Fig. 17 As the trains approach their final destinations all clear sensor blocks have returned to the color white, indicating they are unoccupied.

effects. I also have a Yardmaster's Panel that does the same in the main yard. Each panel also has built in track routing that is activated by the click of a button on each panel.

The use of JMRI's PanelPro® adds a lot of opportunity to a railroad and takes advantage of all the exciting features offered by DCC systems. The more you play with JMRI, the more things you can dream up to do with it. **I**

Bob Rodriguez has been a model railroader for over 40 years and has built several small and medium size layouts including assisting with construction of the Prince William County Model Railroad Club's layout in Quantico, Virginia. He is the President and Chief Operating Officer of the Nickel City Line Railroad Company (What that means is that

since he built it, he can give himself any title he wants) and a founding member of the Prince William County Model Railroad Club where he served as the club's Secretary, Treasurer, Newsletter Editor, and Show Coordinator. As a member of the NMRA he has earned four Achievement Certificates in Electrical, Scenery, Association Volunteer, and Chief Dispatcher. He is working on three more certificates towards his Master Model Railroader Certificate.

Bob began operations sessions on his Nickel City Line railroad in November 2002 and has hosted over 70 sessions to date, introducing 73 model railroaders to operations on his railroad. He also operates with a round-robin group of model railroaders from Maryland and Virginia. You can view Bob's layout at: <http://home.comcast.net/~nclrr/>.

NMRA® Presents: Concrete in Railroad Construction



CONCRETE
In Railroad Construction

Published by the
ATLAS
Portland Cement Co.
30 Broad St. New York

Reprinted by the
National Model Railroad Association

- Published by The Atlas Portland Cement Company in 1909
- 232 pages, 6"x 9" format, hardcover with dust jacket
- New foreword by Tony Koester, NMRA Board member and well-known model railroading author and editor
- Over 120 black-and-white photos and illustrations
- Original preface written by Sanford E. Thompson, a civil engineer described as one of the leading concrete experts of the time
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The Ancient Modeler: Round Four Freight Cars of the 1950's and 60's

by Bob Rosenberg



This time around I thought I would look back on the varieties of freight car that were available to us 50 or 60 years ago. It seemed that they were either simple assembly kits or craftsman style kits with not a whole lot in

between; ready to run out of the box was pretty much a rarity at the time as Rivarossi was just beginning to import items and simple assembly in those days was considerably more than “shake the box and a completed train comes out.”



Varney SLRX steel car kit: author photo



Varney Canadian National steel car kit: author photo

Varney, Globe, MDC, and Athearn were the most popular of the simpler types. Their box car kits were all fairly similar: two single side/end pieces bent at 90° to each other (except MDC; they had separate die-cast sides and ends) with painted sides and silk-screen lettering. Brake wheels, ladders, doors and door slides, and grab irons were separate items. Floors and roofs were metal or wood and the underside details and roof walks were also individual pieces. They ran around two to three dollars and took about an hour for someone at my skill level to build. I expect

that a more advanced modeler could have built them faster, but in any event, they looked great when they were finished and still do today. Mantua Metal Products and Ulrich made kits of somewhat more complexity, but you could still have one of those running in about an hour if the parts were pre-painted. Hopper cars, tank cars, and other types were somewhat different in construction but could also be assembled in a reasonable amount of time. I have no un-built kits from that era, but I found some on ebay as illustrations.

The craftsman type kits were a different matter entirely. Most were wood (usually unpainted except for the sides on some of them), low fusing metal castings, brass sheets, steel wires and other small stampings and various parts, mostly unpainted, that required sanding and smoothing before finishing and finally the application of any decals involved. Ambroid, Main Line Models, Northeastern Scale Models, Quality Craft, Red Ball, Silver Streak, all made kits of this type in varying degrees of complexity from the moderately difficult to, as they say in New York, “fuggedaboutit.” I bought a Quality Craft Pulp Wood Car kit for \$2.00 at a train show in 1972, took it home, took the cover off the box, and saw what appeared to be an enormous number of long wood strips inside; I put the cover back on and never took it off again and since I couldn't find it for this article, I assume it's now someone else's treasure.



Ambroid B&M Snowplow assembled, unpainted wood kit: author photo



Ambroid B&M Snowplow assembled, painted wood kit: author photo

Ambroid sold a large variety of wood based freight and passenger car kits; many of them were specialty type kits, cars that were unique, to say the least, and that were never intended for the mass HO market, although in later years, some of them were reproduced as ready to run plastic models by AHM or some of the brass importers. They were originally designed and produced for Ambroid by Northeastern Scale Models, the company that manufactured many of the wood shapes that we used in those days and who also sold kits under their own name as well. Two of them are pictured here. They were purchased assembled—same car—different colors, but the decal application could have been better. Ambroid marketed them as their “One in Five

Thousand” series which set the limits of the production runs although, for craftsman type kits, it would still appear to be a sizeable number. Examples of some of them would be the vinegar car, the pulpwood car, the Mathieson Dry Ice car, the Speedy Poultry and Refrigerator combination car; there were numerous others. The boxes contained all the necessary parts to complete the car: the wood sections, steel screen and wire for handrails and brake assemblies, trucks, non-operating couplers, decals, and the ubiquitous tube of Ambroid Cement, an early all-purpose sticky clear creation similar to Testor’s Dope or Dupont’s Duco that pretty much held everything together when it finally set. As I remember, it gave you plenty of working time and you could probably get a high from the fumes; there was no EPA back then. I’ve seen some of them after they were assembled and they made a great looking model if you had the time and patience, and it took a lot of both. I tried putting together the B&M Snow Plow and it was, or seemed to me anyway, a lot of work at the time. Everything had to be cut to fit and painted, and I had to use a conventional brush because I didn’t own an air brush in those days. The results were definitely not what you’d call museum quality, but I later picked up one that had been built by someone else and it looked quite nice indeed.

Main Line Models also produced a model kit that made a nice looking finished product. They were manufactured with the usual wood roof, floors, and ends as well as wires, door hinges, and underbody parts, all of which had to be painted, but they did have pre-painted and lettered sides which helped to speed up



Ambroid Vinegar Tank Car assembled, painted, wood kit: ebay photo



Ambroid Speedy Poultry Car assembled, painted, wood kit: ebay photo



Laconia CV Milk Car wood/cardstock kit: author photo



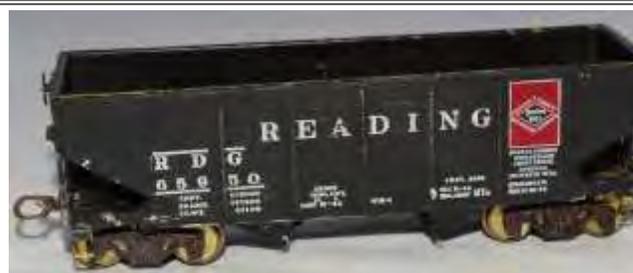
Laconia C-M Wine Car wood/cardstock kit: author photo



Mantua metal Gerber Cox Car kit: ebay photo



Globe B&O steel car kit: ebay photo

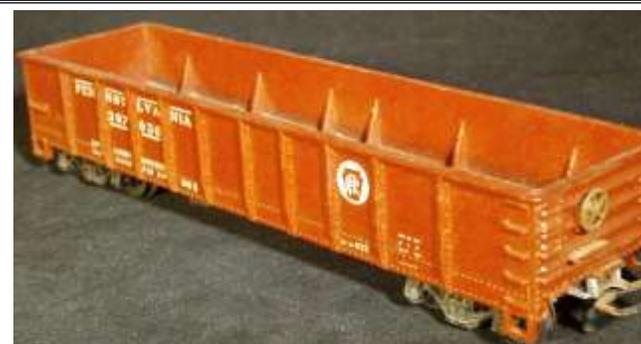


Mantua metal RDG Hopper Car kit: ebay photo

the process a great deal, not to mention improving the appearance in the end. Laconia kits had pre-painted and lettered cardstock sides that took the silk screen lettering much better than the wood sided cars mentioned



Globe D&RGW steel car kit: ebay photo



Mantua metal PRR gondola kit : ebay photo

previously. I built two of them back in the late 1960's while on active duty with the Navy, and although I never completely finished the underside details, they looked so good that I continue to run them today. As an aside, Roundhouse (MDC) eventually turned out mass produced plastic refrigerator car "shake the box" versions of the Laconia kits that I have and the Northeastern Scale Models as well. Athearn also made a plastic refrigerator car that looks suspiciously like the Main Line Models original prototype of the same, again for people with less patience for building freight cars and certainly with less time. I guess you could say what goes around comes around. Silver Streak models were similar in construction to the Main Line products; again, pre-painted and lettered sides with ends, roof, floors, underbody parts, etc. that all had to be painted to match. Some of their kits were produced to the correct prototype but then they would do others using the same parts and design printed up for railroads that didn't actually have them. I have a UP caboose around



Mantua metal Tank Car kit unassembled: ebay photo

somewhere that I built in the late 60's; it looked nice but it was actually an SP, not a UP

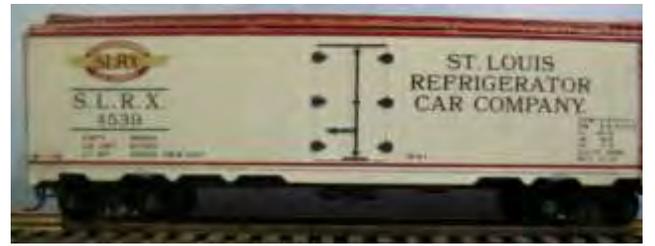


Mantua metal Refrigerator Car kit unassembled: ebay photo

prototype. In those days some of us, anyway, were less picky about that sort of thing.



Varney Battleship Gondola: Bill Mosteler photo



Northeastern Refrigerator Car #1: author photo



Northeastern Refrigerator Car #2: author photo

Addendum to ANCIENT MODELER # 3: It turns out that the OK streamlined passenger car people are still in business making various configurations of their O and HO scale models with both smooth and fluted sides and running ads for them every month in the NMRA magazine (p. 38 of the December 2014 issue). They are now located in Mohawk, New York, and their website is www.okengines.com. **I**

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

by Gil Fuchs

"There are 14 varieties of tomato soup available from this replicator"
In the popular series "Star Trek Voyager" The replicator device responds to Tom Paris who tries to order a bowl of plain tomato soup. Tom asks for a "plain, hot tomato soup" but the replicator keeps asking for more details.

Is the future here already? Is 3D printing on its way to realizing a technology which until recently was thought to be science fiction? There are varying predictions surrounding the pace at which this technology can be embraced and what it can achieve. What seems to be certain is that 3D printing is an emerging technology, rapidly spreading and progressing. For the last 10 years, 3D printing has mainly been tinkered with by experts and hobby geeks. They dedicated their time to building custom devices that would produce 3D shapes from computerized designs. Currently it is spreading to many other areas in manufacturing, primarily used for prototyping and by enthusiastic early adopters. Technology advancements made 3D printing popular and affordable to the general public, in several ways: as print services offered online, design files shared in libraries and public forums or offered for sale, and in the form of personal 3D printers for home use.

3D printing has made a major impact on Model Railroading, as it has solved a long-time problem in the hobby of the viability of small run productions. Specialized models which are not in high demand are not cost effective if produced by conventional mass production methods, and large manufacturers stir away from producing them. Smaller manufacturers who use resin casting for limited runs are not likely to produce these specialized models either, unless they can guarantee a market for a short run of at least a few hundred units. Often, they ask for a minimum number

of early orders of such products, in order to mitigate the risk of not selling them; in turn, this often results in delays, frustrated customers and damage to the manufacturer's reputation.



Enter 3D printing. It allows the modeler to order exactly the model he/she desires at the desired time, team up and share projects with others working on similar designs or road names, and/or print their products at home. Getting a one-off unique item is not an issue, and if one spends the effort to acquire some CAD skills, models can be designed using a computer with free software, the only cost being one's time. There are, however, limitations involved, including the quality of details that can be produced, cost and effort. Home 3D printing is probably not yet suitable for your high-quality brass locomotive replacement, nor for a detailed tiny water pump produced in Z scale. Online printing available from sites like "Shapeways" could turn out cost prohibitive; usually one cannot expect to get a fully stocked kit as can be found in hobby stores, and there is often no guarantee that the uploaded design ordered can become a successful print - many of them are yet to be tested by the customer.

For those who opt to produce their own prints, there are primarily 2 extruded plastic materials used: ABS, petroleum based plastic, flexible and strong, not bio-degradable, and can withstand higher temperatures; and PLA, sugar based plastic, which is more stiff and brittle, but suffers less heat deformation and is more suitable for accurate detail capturing. PLA is the plastic of choice in most cases related to model railroading. In some cases, for example transmission parts and trucks, the strength and flexibility of ABS makes it the preferred choice.

Here are a few examples of 3D printed objects used in and for a model railroad:



The smokebox door of this Kiston model was printed using ABS



An example of parts for home built tools: the cogwheels in this metal sheet roller were 3D printed in ABS.



On the left, a narrow gauge box car. The body and roof are made from PLA. The trucks, ABS. On the right is a F&C commercial model with the same ABS printed trucks.



A "Butterfly" type armored vehicle printed entirely in ABS. The wheels were printed separately to reduce the need for supports and rafts. No smoothing of the surface was applied.

In the next article in this series I would like to share my (limited) experience and knowledge of 3D printing, from a hands-on practical angle of a model railroad hobbyist, adopting the technology for my modeling needs. I'll try to add examples and references that you might find useful and hopefully would save you from some of the accidents, mishaps and frustration I and others have gone through on the path to success. Several approaches to 3D printing would be examined and compared, as they may each be suitable for different requirements, including on-line printing services offering models shared by designers, using CAD tools to design your own models, and using a personal 3D printer.

By no means are these articles a complete reference—you should plan on experimenting, gradually identifying the approach that suits your needs, and much reading. Your mileage may vary, do not expect to get it right on the first attempt, acquiring the skills needed for 3D printing is time consuming and some effort is required on your part. That said, I would encourage any modeler to try 3D printing in some form and to some extent. Despite the effort involved, the possibilities offered by this technology are endless and so are the rewards. **I**

References & Reading suggestions:

<https://www.solidconcepts.com/3d-printing/?gclid=CNHgh5rS7MICFeXm7AodlGEAV>
A

<https://hbr.org/2013/03/3-d-printing-will-change-the-world>

<http://richrap.blogspot.com/2011/10/art-of-failure-when-3d-prints-go-wrong.html>

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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We'd Like You To Meet: Shannon Crabtree

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.

While you may know Shannon through his great blog, Virginia Midland Railroad Blog (www.virginiamidlandrr.blogspot.com), my recent phone conversations revealed a high quality model railroader with a truly wide range of interests. Primarily, he models HO scale but has dabbled in On30 and now N scale. His blog features several separate categories, each with thoughtful, high quality content, content that displays a skill, achievement, and perception level far beyond his years.

Like most of us, Shannon got his start from family members including his father, brother and an Uncle. "I had a 4X6 layout---not 4X8---that was my first step. " He started the blog some four years ago as it seemed easier than a web site and was more suitable to the way he wanted to communicate to fellow model railroaders. "I'm not sure where the bug hit, but I have always (it seems) been a rail fan and modeler. "

He particularly enjoys short lines and branch lines such as the Maryland Midland and Buckingham Branch Railroad, where," I can see the railroad first hand and personal, watching the switching and the motive power and operations. I particularly liked rail fanning the Maryland Midland area in and around Highfield, MD, That's where the name for my railroad, the HO scale Virginia Midland, came from. I have also been strongly influenced by the RF&P, which at one time was in my backyard. My era is the mid 1990's, all based in Fredericksburg, Virginia, near where I live now. "The VMID, which runs from Fredericksburg to Orange, VA, also serves two other railroads: the Virginia Central and Fredericksburg and Northern Neck RR. He uses NCE DCC and most engines have sound. The VMID has been operational since 2007.



Shannon and his wife Carla have three children: Cameron 8, Camden (Bubba) 6 and Caroline 4. Following graduation from Radford University, he has been a PE teacher and coach at Courtland High School in Spotsylvania, VA for the past 15 years. Outside interests include rail fanning, gardening and rooting for the Detroit Tigers.

Shannon admits to several restraints, most notably space and time, but this does not stop him from doing high quality modeling on a wide range of topics. As Norm Wolfe so aptly comments, "Shannon is an excellent modeler who is generous with his time and talents. I am grateful to call him a friend and as well as an inspiration." **I**

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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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.

Hanford Produce Company



cream to a receiving station where he receives spot cash for it.”

Hanford’s eventually built and maintained “500 such stations throughout the Sioux City trade territory where the cream is received, tested for butter fat, and paid for in cash. In 1920 the company paid over \$7,000,000 to the farmers in this way.”

The company was incorporated in 1890, and sold in 1927 (although the name was retained by the new owners). More sales occurred in 1937 and again in 1944. It is uncertain when Hanford’s went out of business.

The company was founded in 1890 by A. S. Hanford who is considered the father of the centralized butter plant idea.

Before the appearance of the hand separator, about 1895, the farmers sold but little milk or cream on the market. They made butter by hand and sold it to the local grocery store taking merchandise in trade. The price paid for the milk did not warrant its delivery to the market. With the coming of the hand separator, Mr. Hanford foresaw the advantages of the central station. His first step in the development of the business was the distributing of separators to the farmer; later he started the creamery on a small scale gradually increasing its size. “No longer must the farmer sell his butter to the store and take merchandise in exchange. Instead he separates the cream from the milk, feeds the skimmed milk to the calves and takes the

In 1920, there were 10,250,000 pounds of butter made in this creamery. They averaged about two carloads of butter shipped per day. They also had the capacity to make about 8000 gallons of ice cream in a day. They were almost completely self-sufficient with three wells with a capacity of each of 500 gallons per minute, two Corliss engine/generator/refrigeration units with a capacity of 300 tons of refrigeration per day



as well as their own machine shop, tinning plant and cold storage. In 1921 there were over 900 people on the payroll.

Though the creamery is gone, the original building is still in use today. **I**

Mike White is a member of several clubs and historical societies all rail oriented. Mike is currently 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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Hub City Highlights

By Marshall Abrams, Bill Demas, and John Teichmoeller

The authors enjoyed two highlights at the October 2014 MER Convention that we'd like to share-visiting the Koppers Railroad Tie Plant in Green Spring, West Virginia and operating on David Moltrip's Moltrip Steel Railway.



Toll Bridge over North Branch of Potomac River

Koppers Railroad Tie Plant

Driving west along I 70 to Hagerstown and south on MD 51, we made our way with only one wrong turn to Green Spring, West Virginia, crossing the North Branch of the

Potomac River, a stream at this point, on a privately owned wooden toll bridge.

Koppers owns and operates the wood preserving plant located on the North Branch of the Potomac River at the northern edge of Hampshire County in northeastern West Virginia. The facility is on the south side of the river opposite Oldtown, Maryland which is approximately 12 miles downstream from Cumberland, Maryland. Surrounding land is agricultural or mountainous forest land, except in the immediate vicinity of the facility. The Baltimore and Ohio Railroad (B & O) began wood preserving operations at the plant in 1911. The B & O operated the facility until 1933 when Koppers was contracted to operate the plant for the railroad. On December 31, 1973, Koppers purchased the facility from the Chessie System (formerly B&O). The products produced at the plant consist of railroad cross ties, utility poles and piling.



Toll House -photos (except panorama) by Marshall Abrams

The Green Spring plant is a primary supplier for the CSX railroad as well as other various railroad contractors and short line railroads. The plant has the capability of pressure treating over 1 million ties per year.



Bill Demas on site tour

We were treated to a very comprehensive tour of Koppers' wood preserving plant, where we learned that Koppers is the Western Hemisphere's leading supplier to the North American railroad industry. Koppers Dual-Treated ties employ both borates and Koppers Creosote Petroleum Solution, which arrives in tank cars from the Koppers facility that produces it. Utilizing the Tru-Core® treatment process, borates provide interior



protection while Koppers Creosote Petroleum Solution creates a powerful barrier to external elements. By applying both proven preservatives, Koppers extends the working life of railroad ties, providing thorough resistance to termites, wood boring insects and fungal decay. To sustain an uninterrupted supply of crossties, Koppers maintains a network of over 30 hardwood crosstie concentration yards and also accepts hardwood from local suppliers.



Stacks of ties



Ties on way to pressure treatment. Note end plates.

We saw how ties are stacked and learned that end plates are very important in preventing splitting of the ends of the ties. We saw ties on the way into and out of their pressure treatment. We saw, but were not allowed to photograph, and ingenious invention by Koppers' employees to affix the end plates under high pressure at both ends simultaneously.

The Green Spring plant was the first of eight Koppers facilities to receive ISO 14001 certification in 2003. The ISO 14001 standard provides companies with a framework to find potential environmental problems and correct them. The plant was also awarded the Environmental Excellence Award for 2003 by West Virginia's Department of Environmental Protection. Environmental improvement and

work place safety continue to be a top priority for the facility. Other Koppers wood treating plants are located at Denver CO, Florence SC, Galesburg IL, Guthrie KY, North Little Rock AR, Roanoke VA, Somerville TX, and Susquehanna PA.

Greenspring Tie Plant Panorama

This photograph was published in four pieces in the Hollis/Roberts book, *East End*. By coincidence, a friend gave me (John Teichmoeller) a two-piece photographic print of it several weeks before the Hagerstown MER convention. It is too good not to share! There are lots of things of interest that could be pointed out in this photo so I will offer what I see. I'll be happy to e-mail a digital version to anyone who wishes.

The photograph is looking north, toward the Potomac River, such as it is in these parts. (Having attended numerous enthusiast group meetings in Cumberland over the years, I always wondered why there had never been a group bus tour of this plant until we crossed over the bridge. Buses can't make it.) The B&O main line (east end, Cumberland Div.) is behind us.

The *East End* book claims the photo dates to 1928. At this time, the plant was owned by and operated by the B&O. Untreated ties come in to the plant on the right (east). Tracks from which tie gondolas are unloaded appear to be depressed. Green (untreated) ties are stacked in this part of the plant to air dry. In the distance, with the sawdust cyclone, is the sawmill where ties are trimmed. Moving to the left, we see a small locomotive. This is a 30" gauge 0-4-0t built by Vulcan Iron Works. This appears to be the B&O

class C-15 that is "missing" from Bill Edson's definitive roster of B&O steam locomotives (he shows "no record" for class C-15). The narrow gauge is used to this day in the tie treatment phase of the process, although instead of a locomotive, a front-end loader and car puller cable are used. (The steam locomotive bears a strong resemblance to the teeny old AHM HOn30 "Minitrains" 0-4-0t that was reengineered and reissued a couple years ago by a new manufacturer--but not yet equipped with DCC and sound!) Note the dual gauge track and the crossing.

Behind the locomotive is a small brick building that we would assume to be the enginehouse. Behind the locomotive is a mule (four-legged, two-eared variety). Was the mule a switcher to bring the tie wagons from the drying area to the treatment area?

To the left of the enginehouse we see poles and longer timbers on treatment wagons. (The plant was currently only doing ties.)

Behind the white building in the center is a single, or perhaps two ancient passenger cars presumably used as office space.

Continuing to move left we see an inclined trestle with, amazingly, 5 entirely different classes of B&O coal hoppers, awaiting unloading to serve the boiler house with the four stacks.

Finally, on the far left is the treatment building with the then two pressurized retorts for the creosote. The stiff-leg crane presumably unloads the treated ties to be stacked for drying and eventual shipment.

During our visit, I did not see any structures that appeared to be survivors from the vintage of this photograph. If you wanted



to model this scene, my sense is that you'd better either have some cheap child labor to cut tie-size stripwood to make those thousands of piles of ties and/or do some creative use of photo backdrops.

Moltrip Steel

On Friday evening, 5 attendees from the Regional, John Teichmoeller, David Baker, Bruce Barrett, Marshall Abrams and Bill Demas arrived at David Moltrip's for an operating session on the Moltrip Steel Railway.



Blast Furnace



Hot Metal Cars



Dave Moltrip describing his layout

Dave began the session with an oral overview of the prototype of what was in fact his family's involvement in the steel industry—



Moltrip Steel in Beaver Falls PA. Much of the layout design is derived from that involvement. He then followed that with an overview of the railroad and what the various operation assignments were. Marshall and Bill drew the assignment of transferring the hot metal cars from the blast furnace to the basic oxygen furnace plant. This was an operation that involved building a train of hot metal



to the rolling mill, -servicing other industries with extras, and interchange operations between mill traffic and the Pennsylvania for both inbound raw materials and outbound steel products. As with the prototype, mill traffic crosses or uses the Pennsy main line for short distances, so signals are an integral part of operations. Dave uses the NCE DCC system.

We appreciate Dave's generosity and the opportunity to enjoy a change of pace operating session and to learn something new in the process. **I**

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Train Meet Calendar Discontinued

by Marv Zelkowitz

For approximately the last year, the Potomac Division of the Mid-Eastern Region of the NMRA has been maintaining a calendar of events in the region - mainly local train meets approximately within 200 miles of Washington DC (i.e., potomac-nmra.org and click on "Calendar.") The creation of this local calendar is being discontinued since it mostly duplicates existing web resources. The website trains.com has most of this information and much of the work in maintaining the Potomac Division website has consisted of re-listing events already listed on trains.com.

Spring) for zip code and "100 miles" for Radius revealed 42 events within 100 miles between November 28, 2014 and March 15, 2015. For slightly further distances you will have to scan the entire list, which at the time this was written had 264 events listed nationally through October 29, 2017. For events more than about 4 months away, you have to recheck the list periodically - some groups are more organized and list their meets 4 to 5 months in advance; others barely get listed a week ahead of the event.

To see the trains.com calendar, go to trains.com and click on Resources/Coming Events at the top of the page (or else go directly to trc.trains.com/events.aspx) and click on "All Events" in the left column. This gives a filter where you can ask for events within so many miles of your zip code. For example recently putting in "20904" (Silver

[Railer.com](http://railer.com) (and click on Events at the top) is another site with an extensive list of events interesting to the modeller. There is no search capability, but the site has a more extensive list of railfan excursions, industry conferences (in addition to train meets) and links to websites of many of the larger rail corporations than does the trains.com site. **I**

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From the Webmaster

What is PD_NMRA and Why is it E-Mailing Me?

by Bill Mosteller

PD_NMRA is the Yahoo group of your Potomac Division, NMRA. Here are lots of ways of participating in the Division.

- You can read the Flyer,
- You can attend the monthly open houses,
- You can attend the operating sessions,

- You can attend the Minicon,
- You can receive broadcast E-mails (if we've got your E-mail address),
- You can visit the web site, and
- You can be on the Potomac Division's Yahoo group, PD_NMRA.

The Yahoo group is the most two-way and non-time constrained of these vehicles.

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, November 22 Brian Sheron's Long Island Rail Road

Another enjoyable Operating Session on Brian Sheron's Long Island Railroad layout attended by (left to right) Tom Gaffuri, Alban Thiery, Bill Mosteller and Martin Brechbiel.



Brian's layout is based on the LIRR's Port Jefferson Branch circa 1964 and extends to the LIRR's terminus at Pennsylvania Station in New York City. The layout scenery is quite detailed throughout and includes a model of the LIRR's Jamaica Station.

The mainline is a double track folded dog bone which gives the appearance of a four track main. There are two busy yards and Sunnyside and Holban each worked by a

yardmaster while the engineers move the trains and perform some challenging (for me anyway) switching at several sidings and industries. Each attendee had the opportunity to be both yardmaster and engineer.

Brian's layout was featured in the September 1997 issue of Railmodel Journal. The layout is DCC-powered by Digitrax. Brian hosts frequent operations using manually generated waybills.

Thanks to Brian for hosting.

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, 2813 Hogan Court, Falls Church, VA 22043. The nominal fee helps to defray incidental costs with carrying out this initiative.



**Coming January 31st Richard
Steinmann's
Erie-Lackawanna**

Rich can accommodate a maximum of twelve people. He uses Digitrax, and encourages you to bring along your throttle, if you have one.

Rich Steinmann's HO-scale Erie-Lackawanna Morris and Essex Division in Reston, VA, models the Erie-Lackawanna Railroad in Northern New Jersey. While the date modeled is May 1965, there is still plenty of rolling stock from the pre-merger Erie and Lackawanna Railroads. The area modeled covers the Morris and Essex and Boonton Lines from Madison to Wharton. Key towns modeled include Morristown, Morris Plains, Dover, and Wharton. In Morris Plains, the scene centers on scratch-built models of the station and freight house, together with the U.S. 202 underpass, as well as other scratch-built models. Dover includes a yard and roundhouse, as well as a scratch-built model of the station, and a kit-bashed freight house. Dover Yard serves as the center of operations as through freights drop off blocks of cars which are then sent out on local freights to Wharton, Morristown, and the Morris and Essex division. Dover is also the terminus for the MU commuter trains from Hoboken and is a major stop for the Pheobe Snow and Lake Cities long distance trains. Wharton is an industrial center with a prototypical track arrangement serving several industries. At Morristown, is a live interchange with the Morristown and Erie and at Wharton there are

connections to the Central Railroad of New Jersey, Wharton and Northern and Mount Hope Mineral Railroad.

The layout occupies about 2/3rds of a 24 x 42 foot basement (with more planned). The mainline run is about 100 feet. The minimum radius is 30 inches with #6 and #8 turnouts (except for #4's in the yard and industrial sidings). Scenery is more than 75 percent complete. Radio Digitrax is used for the command system to allow walkaround operations.

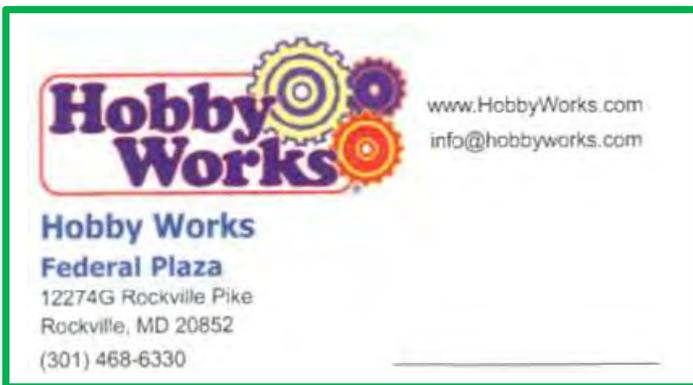
Operating sessions can accommodate 12 people using car cards and waybills for freight car forwarding and there is extensive through and commuter service. There is also an (anachronistic) trolley line modeling the Morris County Central.

**Coming March 14th Dale Latham's
Piedmont Southern.**

Dale can accommodate a maximum of six people. He uses Digitrax, and encourages you to bring along your throttle, if you have one.

Notes from a recent open house: "It was a hot and humid day—but that didn't stop over 30 area model rail fans from making the trek to Waldorf to tour Dale Latham's exquisite HO scale Piedmont Southern. I am not sure what the reason is, but photos somehow fail to capture the same impact as when you visit in person. Those who visited today all came out of the layout room with the same impression—Wow! This is a must see when the next opportunity occurs.

The Piedmont Southern occupies 21' x 23' with a 215 ft. mainline run representing Appalachian freight hauling in northwestern Virginia and eastern West Virginia in summer and fall of 1955. Among the many interesting features is that the scenery on the branch line to Shenandoah depicts a transition from summer to fall. The transition is so subtle that it has to be pointed out to many people before they realize what they're seeing. Dale's layout was featured in Great Model Railroads 2009." **I**



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Layout Open House Report Bernie Halloran's New York, Kittaninny, and Western

A Very Enjoyable Afternoon by Bob Rosenberg

Often one of the fringe benefits of going to a Potomac Division home layout tour is the opportunity to travel through hitherto unseen vistas, even if they're mostly local. The latest one, on November 15th, involved a trip through rural southern Maryland on a bright, crisp, fall day, as the leaves were nearing the end of their annual color show, to Bernie Halloran's home in Owings MD and his beautifully done free-lanced model set in northern New Jersey and southern New York: The New York, Kittaninny, and Western.

The NYK&W represents what I like to call the "less is more" philosophy of modeling, putting less emphasis on the trains themselves and more on re-creating the features of local areas through which they run, not that the railroad doesn't have ample opportunities for operation; as the single track main line weaves around a sizeable room, there are multiple industries for dropping off and picking up cars as well as several interchanges with the real railroads that once served the area: The CNJ, the LH&HR, the Susquehanna, and the NYO&W; there's even a branch via Warwick NY to the New Haven at Campbell Hall. The railroad operates on dcc using the *NCE* system. The

motive power is all first generation diesels, mostly New York Central in "lightning stripe" decor, but in colors other than the original black or gray; including one painted dark red, an example of "poetic license" in model railroading.

Bernie's takes a somewhat different approach to the building of a model railroad as well, in that he completely finishes each section as he moves along - the bench work, the track, the ballast, applicable structures, trees, ground cover, and finally the backdrop - all done before seriously running trains on it (other than, I expect, for test purposes); this is why the railroad is about two thirds completed, with areas where there are no tracks yet or even bench work, but the two thirds that are finished really looks great. At the end of one aisle there's a sweeping curve with a bridge around a replica of the Newark Reservoir and a photo nearby of the prototype to confirm its authenticity. Further along on that section is a cement plant with cement-dust covered hoppers parked in it; actually, most of his freight cars are appropriately weathered. In another section there's a quarry with rock dust covering the ground that's realistic looking



Photo: Bob Reid

enough to get me thinking that I should be wearing a respirator. Then there's a kosher meat packing company that features a rabbi having a quiet conversation with the owner of the packing plant while a large group of cows in the nearby pens are having their own much more audible conversation utilizing a bovine soundtrack device. There's even a model of the museum that houses a collection of the famous fluorescing stones native to the area along with some 1:1 samples of them. Mirrors are used in several locations very effectively. The layout room is finished, with a tiled floor, a drop ceiling, and well-positioned lighting over the railroad for maximum illumination. The whole project has been five years in the making, a not unreasonable time frame when you take into consideration the size of the layout and the meticulous attention to detail that Bernie has put into it.

It was a very gratifying experience to see what can be done by someone who has the time, the talent, and the patience to build such an exceptional model railroad, and I'm really looking forward to seeing it when he's finally completed it. **I**



Photo: Marshall Abrams

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Around the Bend

Ready to share your layout with fellow enthusiasts? Well, we would love to see it. Currently, the schedule is open and we are taking requests for layout tours for 2015. Your layout does not need to be complete. In fact, it is often better that way. When is a layout ever complete anyway?

Hosting an open house is also a great way to meet other model railroaders in the Potomac Division area. And it is not a big deal! The Potomac Division sponsors tours of members layouts approximately once every month. They are held on a Saturday from 1 pm to 4

pm. The Division 1.) can provide you with pointers for preparing your layout for the open house, 2.) will advertise it on the Division web page, 3.) remind the membership about it a week before it is scheduled, and 4.) will provide a greeter to greet visitors, have then sign a guest register, and show them the way to your layout.

So if you are ready to have some great folks over to complement your layout and to share some good stories, shoot Phil Scruggs an email at Layout-Tours@potomac-nmra.org or give him a call at 571-235-6105.

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>

Layout Open House Report Robert Reid's Allegheny and Shenandoah Railroad

by Bill Mosteller

I've visited and operated on Bob's railroad, and attended [his design clinic](#). Let me start out by saying I love the Allegheny and Shenandoah Railroad!

In his clinic at the Bellevue, WA, narrow gauge convention, Tony Koester said that the reason you build a double deck layout is so that your operators cannot "cheat" by simply looking to see if it's safe to proceed to the next passing siding. Writing like a mathematician, I would say that while double decking may be necessary for this, it's not sufficient. Keith Stillman's wonderful railroad in Glen Allen, VA, is double decked, but as it's in a spare bedroom so operators can, in some cases, "cheat." (But of course they wouldn't, would they?) Beyond double decking, you need a large space and a design that puts the passing sidings "around the corner" from each other. And Bob's railroad achieves that admirably. You have to read your timetable.

I just got back from visiting the Allegheny and Shenandoah Railroad and had a great time! I was more than impressed with how much railroad was placed in the basement. The use of shelf benchwork integrated with a central peninsula showed me how I can rethink the use of my townhouse basement! And the painted backdrop reminded me of the actual mountains the fictitious pike is trying to portray. All in a great layout I was glad I made the long trek to see. Thank you Bob for sharing your layout today with the Potomac Division.

*Chuck Wood
NS Washington District MP 18.8
(West Springfield VA)*



Photos: David Arday

Another brilliant feature of the railroad is its double-ended staging yard, East Strasburg/Elkins. One benefit is that it eases the time and trouble the layout host goes through to prepare the railroad for a session. If a host has a life outside of model railroad operations, the long setup time might encourage him to pursue other alternatives. Bob, for example, is also an avid yachtsman and recreational vehicle explorer, so the issue here is real, but the double-ended staging yard means the trains are already in position; only the waybills need attention.





railroad back to Elkins, making the run more interesting and satisfying.

Local freight jobs (my personal favorites) proceed east and west from Petersburg to Parsons and Baker respectively, and then

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return. They move cars out of Petersburg, making room for that yardmaster to spot incoming cars from the mainline freights. Strasburg yard is a second busy yardmaster assignment, with reefers being shuttled between the icing track and the meat packing plant, then then sent on their way; stock cars shuttled between the unloading and the cleaning tracks at the plant before being also being sent on their way, so there's a lot to this job, too.

Finally, Bob's modeling craftsmanship on his railroad reflects the talent and skill of someone who has earned a Master Model Railroader certificate. **I**

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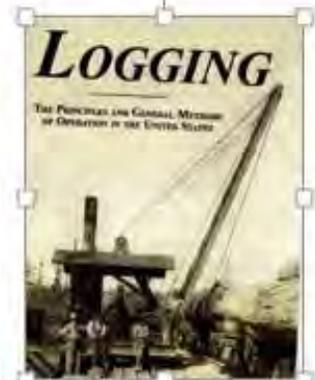
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Layout Open House – Royal Oak and Southern by Stan Knotts

When: Saturday, January 24, 2015, 1:00-4:00 pm

The Royal Oak and Southern (RO&S) by Stan Knotts has been in progress for about 22 years but did not really have a lot of progress until I retired. It occupies a 17 x 25 foot area and represents a small local carrier with a narrow gauge subsidiary. The era is 1939 and the locality is generally western Pennsylvania with no specific towns modeled. I recently added a 10x12 foot EL shaped extension in the next room which is in progress.



My modeling preferences are prototype freelanced (which means to me that everything should be reasonably prototypical). I lean towards an industrial theme and thus you see many industries on the layout. This interest lead me to create the Railroad Industry Special Interest Group (RRI SIG) which I managed for 20 years before stepping down.

I enjoy building structures and have numerous craftsman kits, scratch built structures and kitbashed structures on the layout. Many industries are named for friends and family. The layout is controlled by NCE DCC radio control, with switches controlled by DCC stationary decoders (a work in progress - all switch control panels have been removed). Turnout switch motors are either Tortoise or Switch Masters. Many engines have sound decoders with all to be sound equipped as time permits. The

lumber drying area of the sawmill is a lift-out to permit me to reach that area.

There are several sound CD's installed under the layout including harbor sound, sawmill sound and logging area sound. These CDs are produced and sold by Fantasonics Engineering. There are additional sounds to be installed and will be changing to solid state players called "Dream Players" so they can be selectively controlled by DCC stationary decoders. I have also installed two lighted and animated billboards by Miller Engineering with more to be installed.

All structures and scenery have been built by me with a few exceptions where I have included mostly some small structures from my fathers Troll & Elfin railroad - mostly for sentimental sake.

The scenery has been built using a variety of methods, but predominantly uses a cardboard web covered by red rosin paper with hydrocal rock castings and Scuptamold scenery base. Scenic materials are everything under the sun including real dirt and ground leaves.

The main layout is about 99% complete and fully scened. I will probably never be "finished" as I tend to replace or change items with improved or different ones. I like building and do not spend much time operating (or in my case running trains).



I prefer my structures and equipment to be weathered and frequently rusty. This is a work in progress. I have several model ing bench areas and usually work on multiple projects simultaneously for variety. I have a

blog where I post photos of the projects I work on. It can be found at <http://mrrminutiae.blogspot.com>

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Layout Open House—PRR Nassau Division by John Sethian

When: Saturday, April 11, 2015, 1:00-4:00 pm

The Nassau Division of the Pennsylvania Railroad is a 2 rail O Scale layout "inspired by, but not beholdng to," the Pennsy main line through southern New Jersey around 1956. The motive power includes GG1s of all colors and stripes; P5as (Both boxcabs and modified); F units; a lone shark; a smattering of steam; and even the Aerotrains. The 150 foot long main line is, double tracked throughout, and four-tracked in one 25 foot long, 280" radius stretch. Motive power is by Sunset, MTH and Atlas. Rolling stock are primarily Atlas, MTH, Lionel, Weaver, or Brass. Many pieces have been converted from 3 rail. The layout use the MTH DCS control system, which is now available for all scales and fully compatible with DCC

The track plan eschews operations in favor of watching heavy mainline rail traffic streak and rumble through five distinct scenes: Princeton Junction, a variation on the "Trenton Takes, The World Makes" bridge, an unspecified major North East city, The

Delaware River Bridge, and the Whitford Bridge near Exton PA. Some vignettes pay homage to American artists Edward Hopper and Grif Teller. There is a used car lot featuring every automobile the builder has owned. This is the only deliberate anachronism.

The layout was started in 2006 after a ten year venture into 3 rail O Gauge. The builder has been known to work on the layout for about an hour starting around 5:30 AM. That ensures something gets accomplished that day. It also prevents squandering the freshest part of the day stuck in DC traffic. The basic layout scenery is about 75% finished, about 25% is fully detailed. Most all the catenary poles are installed, but installation of the catenary itself will await completion of the scenery behind it

The layout showcases techniques that may be of interest to modelers in all scales: 1) Painting the walls and the ceiling to look like sky, and using a constant-level fascia to give





the layout a more open, panoramic-photo-friendly, look, 2) A remote control motorized lift out section, dubbed the "scenery elevator," to allow access to hidden trackage, 3) The use of handle bars to ease passing through the duck-under, 4) The use of PVC pipe guard rails around the fascia perimeter to prevent inadvertent decapitation of scenery close to the layout edge, 5) Extensive use of aquarium plants, craft store greenery,

Super Trees and Noch leaves to supply the vegetation, 6) Lego blocks to simulate Pennsy's signature large cut stone blocks, 7) A viaduct carved from pink insulation foam, 8) Period correct vehicles, all adorned with a 1956 New Jersey license plate and at least a driver, as well as aged according to their age in 1956, and 9) Roads made from Durham's Water Putty applied to black foam glued to thin styrene sheets. The roads naturally get a realistic cracked/ pot hole look, because, they are cracked and have potholes. The layout builder keeps a detailed journal of all his activities on the layout. This eliminates the need to remember anything (or repeat mistakes), as it's all written down. As of Dec 7, 2014, the journal is in 28 chapters and has 1225 pages.

The layout requires going down a set of stairs, and then under a 42" high duckunder. However there are handrails along the duckunder which makes negotiating it easier. There is always the rolling chair

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