NEWSLETTER OF THE POTOMAC DIVISION, MID-EASTERN REGION, NATIONAL MODEL RAILROAD ASSOCIATION

The POTOMAC FLYER

Summer 2015

Ed Maldonade's Colorado & Maryland

Photo – Marshall Abrams

PRR Nassau Division by John Sethian

Photo - Thomas Gaffuri

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 *

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

The Potomac Division, Mid-Eastern Region, National Model Railroad Association includes the District of Columbia; Calvert, Charles, Montgomery, Prince George's and St Mary's Counties in Maryland; Arlington, Fairfax, Fauquier, Loudoun, Prince William, and Rappahannock Counties in Virginia, as well as all area independent cities.

Bill of Lading

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

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: Ed Maldonade's Colorado & Maryland, photo: Marshall Abrams; John Sethian 's PRR Nassau Division, photo: Thomas Gaffuri

From the Business Car

by Brian Sheron, MMR, Division Superintendent

Since the last issue of *The Potomac Flyer*, we held our annual Mini-convention (Minicon) at St. Matthew's Methodist Church in Annandale, VA on March 28th. We had 58 attendees, which is right about how many we had the previous year. We received a number of compliments from both Potomac Division members as well as NMRA members from other Divisions. During the Minicon, we also held our annual business meeting and elected a five member Board of Directors for the coming year. The five members elected to the Board were Brian Sheron, Marshall Abrams. Tom Brodrick, Bill White, and Phil Scruggs. Brian, Marshall, and Tom are returning members, and Bill and Phil are replacing Mike White and Bob Reid, who stepped down from the Board this year.

While the Division membership elects the Potomac Division Board, the Board members decide among themselves which positions each of us will have. Following the election, we held a quick meeting and agreed that I would remain as the Superintendent, Marshall Abrams would remain the senior Assistant Superintendent, Phil Scruggs would be the Assistant Superintendent, Tom Brodrick would be the Paymaster, and Bill White would be the clerk.

On Saturday, May 23rd, we held our second meeting. In addition to the routine committee reports, we discussed planning for next year's Minicon. We have been unable to find a venue in Maryland that is both relatively convenient to major roads, and is affordable. As I've mentioned in previous columns, the admission fee that we charge for the Minicon ($10) essentially covers the cost of rent for the facility. A number of venues we have found in Maryland are simply too expensive to rent, unless we wanted to substantially increase the Minicon admission fee (which we don't).

Therefore, we decided to pursue holding the Minicon at St. Matthews in Annandale again next year. I say "pursue" because we still need to find out if it is available in the Spring. Assuming it is, it is actually a in a good location that is fairly central to the Division. We will keep everyone appraised once we secure a venue and establish a date.

While most of you still have the 2013 MER Convention that we co-hosted with the Chesapeake Division still reasonably fresh in your minds, we are tentatively scheduled to host the MER convention in 2018, or 3 years from this Fall. While that may seem like a long ways away, it really isn't. The biggest task is finding a hotel large enough and with the right facilities to host an MER convention, located convenient to major roads, and at a price that can allow us to maintain registration fees, banquet costs, and room costs conquerable to costs at other MER conventions. Thus, the Board decided to start to "look around" now for possible facilities for the 2018 MER convention.

Finally, we discussed whether we wanted to plan a Division Excursion. At the 2014 Minicon, we asked attendees to suggest possible excursion locations. Unfortunately, we did not get a lot of responses. Based on the low turnout we've gotten from some other initiatives, we felt that for whatever reason, folks in the Washington D.C. area have a lot on their plates, and do not have a lot of time to take off a weekend, or even a full weekend day, for a Division excursion. Several years ago, we scheduled an excursion on the "Walkersville Southern" Scenic Railway, which is in nearby Walkersville, Maryland, a few miles north of Frederick. In addition to a scenic train ride on some vintage passenger cars, we also got a guided tour of their shops. We had a good membership

turnout for the trip, and folks seem to have a lot of fun. The Board therefore felt that members might like taking a ride on that railroad again, and we agreed to pursue scheduling an excursion, probably in the Fall (September?). We will keep everyone informed as plans are firmed up.

With that, I want to wish everyone a fun summer. Don't forget, when it starts really getting hot outside, a cool basement with a layout to work on is sometimes a nice reprieve from the heat!

Return to Bill of Lading

Achievement Program News

by Brian W. Sheron, MMR

Since the last issue of *The Potomac Flyer*, we had several Division members get achievement awards.

Ernie Little of Manassas completed the requirements for Model Railroad Engineer-Civil and recently received his Achievement certificate. The Civil certificate requires 3 scratch-built track components (e.g., turnout, crossing), and these must each be merit-judged and receive a score of 87.5 points or higher (out of a maximum of 125). While Mat Thompson, Marty McGuirk and I were at Ernie's house judging his track components, I noted that Ernie had a very nice layout. Not being shy, I urged Ernie to consider volunteering to host an open house for the Division. I'm happy to report that Ernie agreed, and I believe his layout will be on the layout tour schedule for this Fall.

I'm not sure if it is something in the water out there, but our second recipient of not one, but three achievement program certificates is also from Manassas. John Paganoni successfully completed the requirements for Master Builder-Motive Power, Master Builder-Structures, and Master Builder-Prototype Models.

For those of you who attended the recent Division Mini-convention and visited the contest/model room, you got to see some of John's engines and structures. John is an outstanding modeler, and it was a true pleasure for Marty, Mat, and me to visit his home and judge his models, because we not only got a chance to see his models, but John also has a beautiful diorama that he built for the Prototype Models AP category. John is currently in the beginning stages of constructing his layout, so I'm hoping he makes good progress to the point where we can convince him to also host an open house.

And by the way, in addition to being an outstanding modeler, John is also an accomplished Mandolin luthier. He says he makes about one mandolin a year, and plays in a group in his church.

Finally, for those of you interested in pursuing your MMR or just certain Achievement Program (AP) Certificates, there are new, easier requirements for the "Model Railroad Engineer - Civil" AP Certificate. Please read the separate article in this issue about the new requirements.

Return to Bill of Lading

Recent Changes to the "Model Railroad Engineer—Civil" Requirements

by Brian W. Sheron, MMR

There is a new development related to the requirements for the "Model Railroad Engineer—Civil" Achievement Certificate that I want to bring to your attention, and it should make the requirement to scratch-build three track components much easier to achieve.

Previously, one of the requirements for obtaining the "Model Railroad Engineer—Civil" AP certificate was to scratch-build three track components and have them merit-judged against the standard five merit-judging categories (construction, detail, conformity, finish and lettering, and scratchbuilding). Each category would be judged by a panel of three judges, and points were awarded for each category, with the number of points awarded based on the judges' collective opinion of how well you did in each category. If the points awarded in each of the five categories totaled 87.5 or greater, then a merit award was given.

What has significantly changed is three of the five categories, namely construction, conformity, and scratchbuilding. I will discuss the change to each of these categories.

1.) Construction—previously you were judged on workmanship. For example, if you built a complex track component, such as a dual-gauge turnout, you earned more points that if you built a more simple, single gauge turnout. The new requirement does not take into account complexity of the component when awarding points. The new requirement is:

Workmanship: The difficulty or complexity of what the modeler has attempted and how well the model was constructed. (Self-powered locomotive successfully traversing all routes gives a score of 40.)

What this means is that if you build three track components (e.g., single turnout, crossover, and crossing), all you need to do is power them and demonstrate that a locomotive will run through them in all directions and not derail and you receive the maximum points (40) that can be awarded for this category. In other words, building a complex dual-gauge turnout or three-way turnout will not earn you any more points than building a simple, single gauge turnout.

2.) Conformity—previously, you were usually required to produce photographs or prototype drawings of each track component that you scratchbuilt to demonstrate that the component you build conformed to the prototype. This meant that items like guard rails needed to be included. The new requirement for conformity states:

Prototype Practice. How well has the modeler reproduced the prototype? (All applicable NMRA Track standards (S-3) are met using an appropriate track gauge gives a score of 30.)

What this means is that you don't have to produce photos or drawings of prototype track components, and you don't have to add details unless they need to be included in order to meet the NMRA standards. All you have to do is get an NMRA track gauge, and demonstrate that all of the relevant dimensions of your scratchbuilt track component meet the NMRA standard, as measured by the gauge.

3.) Scratchbuilding—Previously you were judged on how much of each track component that you built was scratchbuilt. For example, out of a maximum score of 25 points, judges might award you less points if there was some aspect of a scratchbuilt frog or set of points that they felt was not worthy of awarding the full 25 points. The new requirement states:

How much did the modeler build from scratch and how difficult was the

scratchbuilding. Commercial frogs are not allowed but commercial individual rail (not Flextrack), ties and spikes are. (Scratchbuilt frogs and points give a score of 25.)

As you can see by the revised requirement, basically all you need to do is scratchbuild the track component, including the points and/or frog, and you earn the full 25 points. This is similar to the previous requirement, but there is no detailed judging involved.

So what does all this mean? If you look at the three categories that I just described the changes to, they essentially become a pass/fail test. If your locomotive runs in all directions over the track component without derailing, you get 40 points. If your track component meets all NMRA track gauge standards, you get 30 points. If you scratchbuild the frog and/or points of the track component, you get 25 points. Add them up and they total 95 points, which is 7.5 points more than you need for a merit award for that track component.

Therefore, from the standpoint of the remaining two categories, namely "Detail" and "Finish and Lettering", you really don't need to do anything to address these categories, unless you choose to. Thus, you don't need to add detail, such as tie plates. You also don't need to paint or weather either the rail or the ties. For that matter, you can build the component on PC board ties in which you only may need a half dozen or less (i.e., only those necessary to hold all the track component in place).

These new requirements can be found on the NMRA web site, on the Achievement Program web page, under the "Forms" category, and under the "Master Model Railroad Engineer - Civil" assessment form.

Return to Bill of Lading

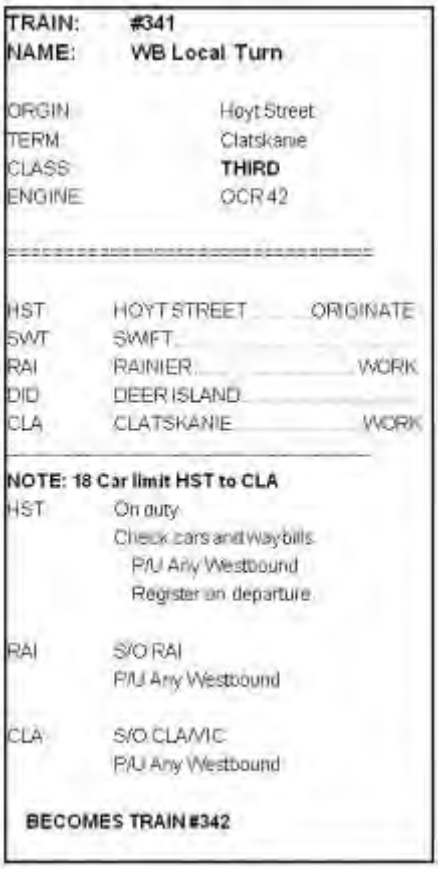
Mark me up! Oh No! Paperwork!

by Mat Thompson

Model railroad operations simulate in miniature the practices and procedures of real railroads. And, you know what? Real railroads ran as much on paper as they did on coal and oil. Thinking "outside the box" to come up with a paperless operating scheme misses the point. The box is already defined by the way railroads have and still do move trains down the rail.

But that's not a bad thing. Let's suppose that on a Crew Call Board you are marked up as the engineer of Train #341. What are you supposed to do with your train?

On the prototype, a Train Procedures Directory or similarly named booklet describes every track, every customer, every procedure and anything else that might apply to a particular train. On most model railroads, you will get something much simpler, like the Job Card I use on my Oregon Coast Railroad (OCR).



TRAIN: #341
NAME: WB Local Turn

ORGIN Hoyt Street
TERM Clatskanie
CLASS THIRD
ENGINE OCR 42

==========

HST HOYT STREET ORIGINATE
SWT SWIFT
RAI RAINIER WORK
DID DEER ISLAND
CLA CLATSKANIE WORK

NOTE: 18 Car limit HST to CLA
HST On duty
Check cars and waybills
P/U Any Westbound
Register on departure

RAI S/O RAI
P/U Any Westbound

CLA S/O CLA/VIC
P/U Any Westbound

BECOMES TRAIN #342

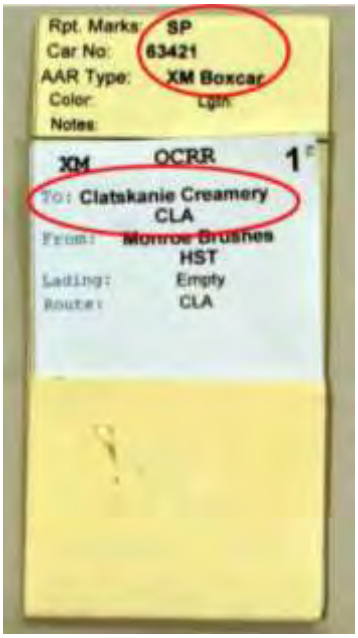
Every town where your train has work is listed in order, and the card also tells you what that work is. In the example, at Clatskanie, your train will set out cars for Clatskanie and Victoria and pickup westbound cars.

Read it! If you run slow and know the work of your train, you are a darn good operator, even if this is your first run.

Now that the paperwork told you what to do, are you ready to roll? Nope, not until the Operator gives you a Clearance, sometimes called a Form A, which is your authority to occupy the mainline. On more modern railroads, you may get permission over the radio or telephone, but you can bet the Dispatcher wrote down what he told you.

This sounds a bit bureaucratic, but looking at a single track mainline you might wonder what would happen if another train were coming towards you. The answer is nothing good. Be glad someone is creating a paperwork picture to keep track of what is going on.

Now you know what to do. How do you know when? Most model railroads use Timetable and Train Order procedures. That means you read the Timetable. If you are a scheduled train, you work to the times listed. If you are an Extra, meaning your train isn't on the schedule, you use the schedule to figure out when you can safely proceed. Trains don't run magically on time. Knowing how to adjust can be complicated but you will get the hang of it with experience.



Rpt. Marks: SP
Car No: 63421
AAR Type: XM Boxcar
Color: Lgtn
Notes:

XM OCRR 1
To: Clatskanie Creamery
CLA
From: Monroe Brushes
HST
Lading: Empty
Route: CLA

What are you supposed to do with the cars you are pulling, and how do you get other cars? The answer is on the carcards and waybills you get with your train. There is a carcard for each car, and each card has a

waybill tucked in the card's pocket.

In this example, the Job Card shows train #341 is to set out (S/O) and pick up (P/U) cars in Clatskanie. The example carcard shows SP boxcar #63421 goes to the creamery in Clatskanie. If there are any outbound cars, their carcards, with waybills, will be in the bill box attached to the fascia.

Did you notice that you aren't writing anything or creating a bit of paperwork? You are just reading selected pieces of information you need to do your job. You can run all day without a pencil or a blank piece of paper. Layout owners create many documents, but operators don't.

Your run is finished. Maybe the dreaded paperwork wasn't so bad after all. It told you what to do, when to do it and where to do it. If you are just playing trains, you can swap a boxcar for a boxcar and a hopper for a hopper, but if you are operating a railroad, how could you do it without paperwork?

One last thought about the paperwork. In a subtle way, the paperwork sets the tone of the session. Finding what you need to know and planning your movements is the challenge of operations. It's an adult hobby, regardless of your age, that takes smarts, focus and a willingness to challenge yourself. Serious operators are playing chess, not checkers.

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.

Return to Bill of Lading

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

by Gil Fuchs

Welcome back to the 3D printing series! In this part I would like to deal with some of the practices you can learn and adopt to improve your experience and quality of your 3D prints. First and in order to set expectations, be aware that a certain percentage of your printing attempts would end up unsatisfactory. This is not necessarily bad—if you own a 3D printer, you have to find out its limits, and that would require experimentation and testing. Similarly if you are new to using commercial 3D printing services, part of the learning curve and experience you would gain is a result of limitations of these services, and print results would not always meet your expectations.

Avoiding common printing design pitfalls

A few common causes of lower quality prints are related to design issues. Design problems related to holes, gaps and improper 3D rendering formats were discussed in part 2 of this series. Other issues are related to proper orientation, placement and complexity of the design. Objects that are designed and/or positioned on the print platform with large overhung surfaces would require complex support structures, to avoid sagging of the extruded plastic. In most cases, the same material used for printing both the objects and supports - however, material used for support is wasted and has to be discarded. In addition, it has to be carefully cut off the printed object, followed by sanding to get smooth quality surfaces.

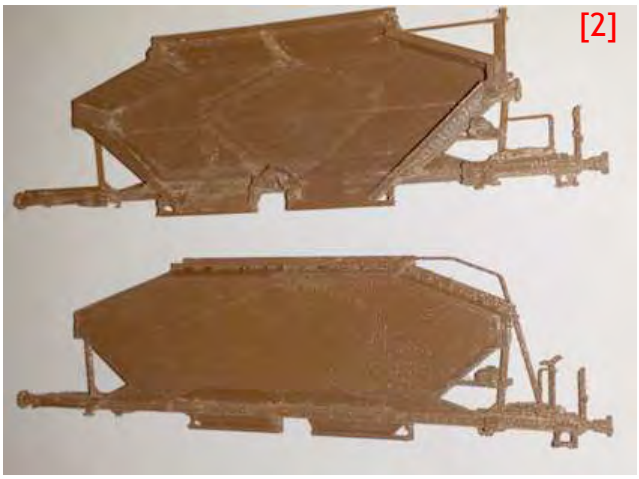
There are several techniques that can be used during design to reduce or eliminate most of the support structure required for your print. In essence, since extruded 3D printing is layered, the goal is to reduce the number of overhanging surfaces. Try to find the largest edge surface your object has, turn and orient the object such that this surface serves as a base. Most 3D design software support 3D rotation using dragging, or by specifying the angles for each axis. As demonstrated in part 2, some design tools allow splitting the object along a center axis. Chosen correctly, this creates a large base for the split parts, and eliminates or reduces required support.

In some cases, overhanging surfaces and support platforms cannot be avoided. If you happen to own a double extruder head printer, a helpful technique is to print the support structures using a 2nd print head loaded with different material than the plastic used for the main print. A good choice would be PVA—this material is water soluble. Once your object is ready, it is dipped in warm water, and support structures attached to it melt away. This eliminates most of the cleanup required to remove supports.

Picture 1 illustrates a failed attempt to print a grain hopper car. Notice the 2 material (PVA—yellow) used for printing supports. The problem with this print was that the 2nd extruder kept spilling material, interfering with the main print. Eventually the object got detached from the printing platform. I was more successful in following attempts.

In picture 2, the same grain car, printed in

PLA, two halves reducing the amount of support required. Supports were printed in water soluble PVA—using regular PLA would have caused details to break apart while cutting/cleaning the supports.



Optimizing printing temperature

There are numerous other factors that may impact your print results and should be considered. One key factor is the temperature at which plastic is extruded. Getting to the right temperature is a trial and error tuning process, which has to be performed individually for every printer and material used, since there is variance in the parameters of each extruder head and plastic properties. The same material class in different colors typically exhibits different temperature parameters, sometimes varying among spools or production series. Starting with the lowest temperature at which the plastic is extruded, the temperature is slowly increased during repeated print tests, until bubbles start to appear and the extruded material is liquid and flows unevenly. Close to mid-range in this process would be the best printing temperature for your printer and the specific material used.

Picture 3 is an example of a boxcar printed while extruding temperature was set too high. Notice the resulting granular appearance of the PLA, and the holes in the surface. Styrene or PVA pipe glue will not melt PLA—it is best glued using Super Glue, and is difficult (but possible) to polish using chemicals.

Platform leveling

It is essential to have the printing platform as level as possible in order to produce high quality prints. A level platform allows the print head to operate at a very small gap above the surface. As I have learned following many failed attempts, the first layers of a 3D print are most important to ensure adhesion of the object to the platform during the process and avoid deformation. Follow the platform leveling procedure as specified for your printer—frequently and if possible at the start of every series of prints. Professional printing facilities use gauges to level the printing platform; home users would likely test by positioning the extruder nozzle at various corners pf the platform and feeling the gap using a sheet of paper.

Platform Adhesion

Preventing any unintended movement of the printed object during the printing process is crucial to achieving successful and accurate print results. There are many solutions offered in articles and on-line for this common problem.

One major reason for the printed object to detach from the platform is the uneven expansion of hot extruded plastic. This affects ABS plastics more than PLA, which does not expand significantly with temperature change. Unlike commercial printers that use an enclosed heated chamber, creating even distribution of heat within the printing space, most home printers have to deal with room temperature, some offering a heated print platform to improve adhesion. During printing, lower layers cool off and contract,

while the top layers are still hot and expand, causing the object to warp and lift off the platform. A heated platform helps in keeping to lower layers in semi-solid, softened state, trying to prevent warping as much as possible. Try not to overheat the platform—as the plastic heats up it softens, liquefies and loses its adhesion above certain temperatures. PLA typically does not require a heated platform and sticks well at room temperature, or you may experiment by heating the platform slightly, to about 65—70 degrees, whichever works best. ABS requires higher printing temperatures as well as heating the platform to 120—140 degrees, and is subject to warping.

The print platform is usually covered with materials in an attempt to improve adhesion. Following on-line reports I was able to use blue (painter's) tape purchased from hardware stores quite successfully for printing in PLA. In order for the tape to remain effective, the platform must not be heated. I find Kapton tape to be better cover material for heated print beds, creating a more even surface than blue tape, and suitable for both ABS and PLA. The down side is that Kapton tape tends to be expensive and has to be changed often, as it gets damaged or torn by sticking printed objects. Recently some of the area stores (Micro Center) catering for 3D printing, started carrying Kapton sheets for that purpose. If you are willing to make a longer term investment, I would recommend a tempered glass attachment for the print bet. Typically it should be 0.25" thick and withstand high temperatures without cracking. Printing on glass produces high quality, even and detailed results, and the platform lasts practically forever.

In addition to the platform cover, adhesive sprays may be used to further increase adhesion. I have had very good experience using hair spray (the same cheap kind used for modeling trees), as well as gloss finish—avoid breathing the fumes and work in a well-ventilated area especially while the print bed is heated. I find the best adhesion for ABS is achieved by using a slurry of scrap ABS, mixed with and melted in Acetone at approx. 50% - 50% ratio, and spread on the print bed in a thin cover layer. This mix is fairly easy to make, although it creates acetone fumes—try to work outdoors if possible and seal the remaining slurry in a glass paint bottle. In some cases the printed object is stuck to the bed and some effort (as well as an Exacto knife) is required in order to release it.

The bridge sections in picture 4 were printed in black ABS, eliminating assembly of beam parts and painting. They were then glued to the helix plywood using hot glue.

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.

Return to Bill of Lading

The Ancient Modeler: Round Six
Early Icons, Part One

by Bob Rosenberg

Icons, originally religious symbols used by the early Christian church, have long since evolved into a term now used to describe an important or unique person in some field or other. We've certainly had (and still have) icons in model railroading and one of the first and foremost that comes to mind is John Allen.

Affectionately known as the "Wizard of Monterrey," one of the many things that made John unique, in addition to his superb modeling skills, was that he was a commercial photographer, which meant he could arrange his work schedule around his model railroading instead of the other way around, like the rest of us have to do. Furthermore, he was a bachelor so, according to a modeler friend of mine who worked with John (Dave Cooper, for those who remember him), it was possible for him to devote long periods of time to his modeling such as working (or talking) all night because there was no one to tell him that he shouldn't do things like that. His profession demanded that he have an "eye for detail", a gift that I've often attributed to Potomac Division members when describing their home layouts. His layout, the Gorre and Daphetid, [pronounced “gory & defeated”] a name he later regretted because he wished he had used something that more realistically represented the area he was modeling, began as a modest four by seven foot model with two levels, but was constructed not on a flat board, as were most model railroads at the time, but on an early version of the open grid work design that most of us use today. Eventually it expanded to a 6' by 20' setup that pretty much filled his small house near Cannery Row of John Steinbeck fame, and when that proved to be too small for him he moved to a bigger house about a mile away where he excavated part of the basement himself so that the railroad could fill the whole room. The final G&D was 24' by 32' and the original 4' by 7' layout was incorporated into both it and his older predecessor layout in the smaller house (classic examples of re-cycling). It was intended to represent a short line mountain railroad in the 1920's. With the help of friends to both build and operate it, friends that were some of the better known names in model railroading at the time, the massive project moved along to near completion on a reasonable schedule, lacking only one bridge and some wiring at the end. The progression of the different layouts could be followed to some extent in the numerous Model Railroader Magazine articles by and/or about him over a 26 year span, as well as the Gordon Varney ads that appeared on most of the rear covers monthly through the 1950's. John was a prolific innovator although he was usually reluctant to take credit for his work as he felt that someone else probably had similar ideas at an earlier time which some of my later research proved to some extent to be true. He was one of the first modelers to utilize floor to ceiling scenery (one floor area represented a river bed which, my friend told me, once had real water in it from a flood) to operate trains in a realistic manner by moving passengers and freight from place to place on a schedule. The G&D was intended to be operated as a point-to-point but also had the capability of continuously running as a multi-folded dog bone. He was a pioneer in weathering his equipment, in building scenery by using cardboard strips to make a lattice the approximate shape of the finished scene he had in mind and then covering it with paper dipped in plaster, and in using mirrors to create the illusion of additional tracks where there were none, things that are fairly commonplace nowadays but were very much

out of the ordinary back then. Since there were few well done figures in those days (human or animal), he would make his own by bending armature wire into the approximate shape of whatever creature he wanted and added wax to fill it out; the famous prehistoric Brontosaurus, complete with an engine number, that he used as a switcher to move freight cars around the yard was made this way. John was certainly not above slipping subtle jokes into a scene when the opportunity presented itself. Another was a box car with a steel ball in it that rolled back and forth triggering a "hot box" indicator light under it if it wasn't operated smoothly. And he also liked to, as one of his operators described it, "play God" by dimming the room lights and making everyone run in the dark with only the lights from the structures and trains for illumination. He also built a momentum throttle system long before they existed commercially by installing fly wheels in his locomotives and rigging an electrical device of sorts to keep the voltage in check until the fly wheel was sufficiently spinning. And he developed a simple method of keeping his tracks clean by attaching fiber board pieces, rough side down, under some box cars in general service and pulling them around as part of regular freight trains, a technique that I adopted for use on my own railroad with great success. He was also adamant about prohibiting smoking around the layout at a time when few others much thought about it; he believed that the tobacco smoke residue gummed up the track, interfering with his operation, and he was right. There was, unfortunately, something else that apparently neither John nor any of his regular operating crew knew; the heating system had developed a defect. Living on California's Monterrey Peninsula, he didn't use it all that much, but he suffered a sudden fatal heart attack at age 59 in January of 1973 and, even though the electricity had subsequently been turned off, a fire started in the basement that burned the support timbers, weakening them to the point that the main floor of the house collapsed onto the railroad, destroying it. Fortunately for us, his railroad has been documented in numerous articles and an entire book which I have around somewhere. So while the railroad itself is gone, the spirit of the G&D lives on in such venues as collector type freight cars occasionally issued by the NMRA. Much of the information for this article came from the lengthy, thoughtful obituary written in the March 1973 issue of Model Railroader Magazine by Linn Westcott who was the editor at the time and something of an icon himself. I still have my copy of it; there occasionally are advantages to never throwing anything away.

If you'd like to pursue it further, there's more information in the Kalmbach Archives if you have access to them, or you can Google "John Allen model railroader." There's rather extensive Wikipedia information on him, and Sunday River Productions has a brief clip from their commercial video on the G&D. Another commercial site has many of the car reproductions and more video DVD by other producers including a series of photographs, slides, and drawings of the various layouts; there's far too much available to list it all here but Googling him will magically get you all kinds of interesting information. I'd also like to thank MMR and Potomac Division member Bill Day who generously loaned me his four-disc set of Kalmbach's 75 years of Model Railroader Magazine to help me make this article as historically accurate as possible.

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.

Return to Bill of Lading

We'd Like You To Meet: Jane Clarke

by Roger Sekera photos by Pete Clarke

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 I am sure there many others, Jane Clarke is one of two female model railroaders that I know, Mary Miller being the other. Even a modest reading of Jane's background, achievements and interests is worth your time.

Raised in Towson MD, Jane Clarke graduated from Loch Raven HS, "which is interesting given that Pete, my husband, and I have become avid Ravens fans." She then received a BA degree from Western Maryland College in Westminster MD with a major in psychobiology, a field of study that focuses on the biological basis of behavior. That was followed by a 2002 MS degree in biomedical sciences from Hood College and a long career with BioReliance in the field of Genetic Toxicology, which studies the effect of chemicals on the genetic makeup of an organism. Basket weaving this is not.

"Having worked as a scientist has driven home the need to work to attain a finite goal. I've always striven to define and then reach an end goal. My model railroading started with the Lionel train set under the Christmas tree and 'the obligatory 'oval of track on plywood. But I also remember going to New York by train to shop for school clothing and visiting the large stores with their train layouts."

"Our interest in the East Broad Top and narrow gauge railroading started during a visit to the Penn Alps restaurant in Grantsville, Maryland, where a picture of the railroad led to a trip there. That day the EBT had four steam engines running and we were hooked. A few years later Pete came home with a brass HOn3 model of EBT #12 (a 2-8-2)--the rest is history. An N scale 4 by 8 layout led to a freelance HOn3 shelf layout, then a peninsula of some EBT, and finally a decision to build the whole EBT in the basement. Initially, I got interested in buildings and structures and that led to the scratch building of the roundhouse and station in Robertsdale. Both structures were scratch built from original drawings but had to be substantially downsized. I told Pete that I needed 2 feet by 3 feet for the station, but he had me compress it into about a 1 foot by 8 inches. I

EBT roundhouse and station

also found that I liked making scenery and trees."

Jane and Pete are long-time members of the Friends of the East Broad Top (FEBT.org). Jane recently took over as Managing Editor of Timber Transfer the quarterly magazine of the FEBT. Two issues have been released and she's working on two more. "Fortunately, there are a lot of skilled modelers and restoration folks associated with FEBT so finding material has not been a problem." Jane served as engineer-for-a-day in August 2011 when Pete gave her a birthday present that had her drive the 11AM train from Colgate Grove back to Orbisonia!

Using car cards, waybills, and TT/TO, Pete and Jane have hosted regular operating sessions for the past three or four years on their HOn3 version of the EBT. Having personally operated on the layout twice I can attest that the level of reliability is extremely high. "We've gone through several iterations of the timetable, but I guess that's to be expected. I really did not like running trains until we got command control: first analog and then Digitrax DCC."

The final item of note is Pete and Jane's 2014 bike ride on a tandem from Damascus MD to Astoria OR, a distance of 4185 miles. Their original intent to add that leg to a leg down the west coast and then back east returning home was shelved upon reaching the Pacific Ocean. The trip was amazing, but they are happy to be back home.

In all, this is an impressive résumé of breadth and achievement.

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 TT/TO operational for over four years.

Return to Bill of Lading

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.

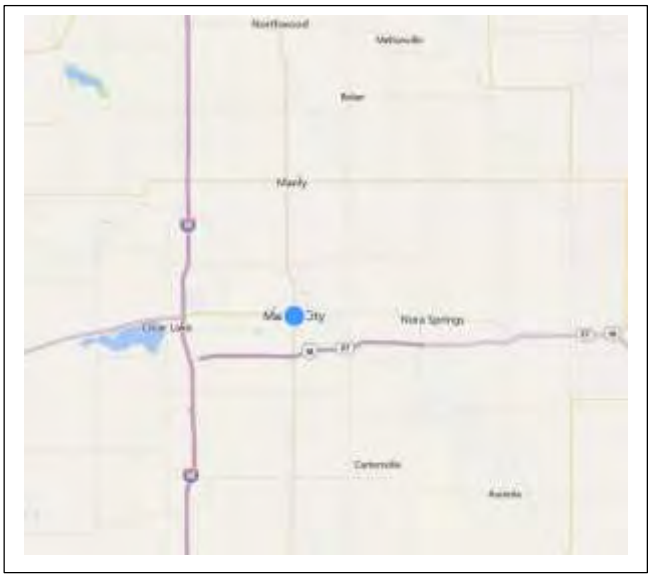
Jacob E. Decker & Sons Packing Plant - Mason City, IA

In 1896-97, John T. Richards (1837-1903) built a meat packing plant along the Winnebago River in the northern portion of Mason City. Jacob E.

Decker and his son Jay began renting the Richards plant on July 4th of 1899.

Jacob and Jay Decker purchased the Richards plant for $6,000 in 1901 and established the Jacob

E. Decker & Sons Meat Packing Company. This plant provided a thriving business for the Deckers and greatly boosted Mason City's economy. At one time, the plant employed 1,300 people.



With the arrival of the Minneapolis & St. Louis Railway (MStL), the Decker Packing Plant became one of the railroad's largest meat producer shippers. In 1955, the plant shipped 5,478 carloads, approximately 90% of the animal products shipped that year.

Hogs and cattle were slaughtered and processed into meat products and meat by-products. The plant quit processing sheep around 1950. During a normal day, 5000-6000 hogs (600 an hour) and 300 cattle were processed. In addition to livestock many other products were required for operations. Salt, sawdust, sugar, coal, cardboard, soda ash and ammonia were also shipped in by rail. Most inbound commodities especially tin cans were billed to Emery IA headquarters of the Mason City & Clear Lake Railway (MC&CL). These loads were delivered directly to Deckers by the MStL. The MC&CL would get the line haul charges, while the MStL only collected a switching fee.

The plant had it's own power plant which produced steam, electrical power, compressed air and pressurized ammonia. There was also an ice plant. Chunk ice was made for icing refrigerator cars and crushed ice was made for plant operations. At the "car line" hot water was used to clean reefers, steam was used to clean the tank cars. Tank cars were loaded with lard, tallow, white grease and "stick" (evaporated tank water). Other products shipped included Fresh pork, cured pork, smoked meats, bacon, canned hams, beef quarters, bone meal, tankage, dried hog hair and beef hides. A Milwaukee Road waybill showed a car load of canned pork was routed MStL Mason City, Iowa, to Minneapolis MN, then Milwaukee Washington Railroad to Seattle, Washington.

Armour purchased the Decker plant in October of 1935 for $4.972 million, operating it as Decker Packing Plant until its closure in 1975. The plant, located between Federal Avenue and the Winnebago River north of 14th Street was torn down in the 1970's.

Excerpted from a series of news articles compiled by Sharon R. Becker, March of 2011.

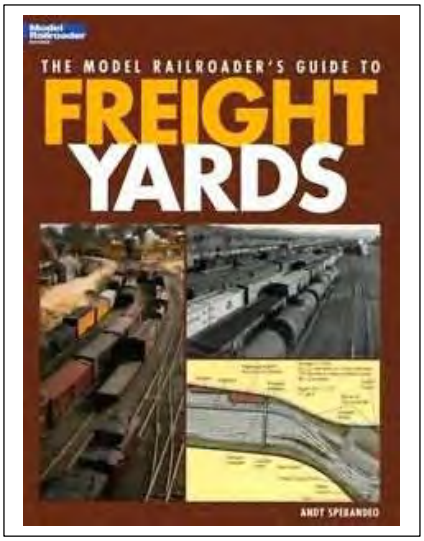
Return to Bill of Lading

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.

[Editor's note: Mike is running out of billboard reefers and other cars decorated with the names of companies. If you have a picture of a model or prototype, please send it to Mike mm.white@comcast.net.]

Two Good Books

by Mat Thompson



Book reviews are typically about new books but once in a while looking back can be a good idea. If you are planning a layout or just starting to build one, Kalmbach's The Model Railroader's Guide to Freight Yards by Andy Sperandeo and The Model Railroader's Guide to Locomotive Serving Facilities by Marty McGuirk are the go-to books you need.

Both are older. Sadly, Freight Yards from 2004 is out of print and eBay prices start at $60 or more. Check the racks at hobby stores and tables at swap meets. Better yet, tell Kalmbach http://mrr.trains.com/magazine/contact?type=lte) it's time to issue a reprint. Locomotive Servicing Facilities was published in 2002 and is still available but that can change so buy it now if you are at all interested in the book.

Andy starts Freight Yards with an overview of what yards are and how they function. In the second chapter he details the composition of a yard track by track, showing how the small yards typical of model railroads can still perform the tasks of prototype yards. Tips include how to save space with different turnouts configurations, where to place uncoupling magnets and how to build a yard ladder.

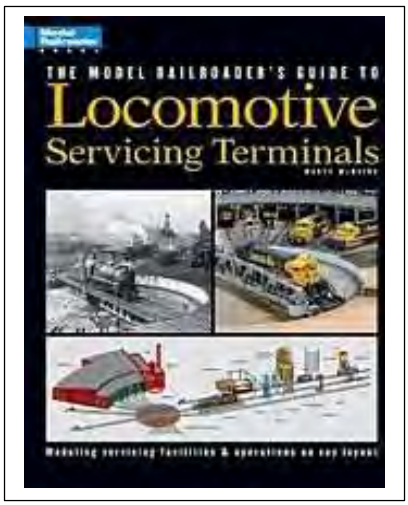
He then describes several model yards, explaining how each is designed to do the work needed on the railroad it serves. Treating the yard as a model is also covered with sections showing how to build a scale track and then how to use it in model railroad operations.

There is a chapter on designing model railroad yards based on prototype yards and another chapter explaining staging, both how it is used and how it differs from a yard. The final chapter tells how to operate a yard. Typical of every Kalmbach book, there are many photos. All are clear and well chosen for the points they illustrate.

While all the bits and pieces of the book fit together very well, the best thing is with just a few evenings of fun reading, you will not only understand yards, you will really have a good grasp on how railroads function.

On most of our model railroads, co-located with the yard is an engine facility. That's where Marty's Locomotive Servicing Facilities is such a great help. Section One explains facilities for steam engines. Section Two covers facilities for diesels. Section Three has examples for modeling the facilities.

Like Andy, Marty's writing is clear and easy to understand. He knows how precious space is on a model railroad and offers plans for small engine facilities. The book is filled with modeling ideas and projects. They range from the fairly simple such as detailing an Atlas water tower to installing a turntable and roundhouse. The photos and drawing are excellent and help tell the story well.



Both of my books are dog-eared and tattered. They even have some glue stains and notes written in them because as I built my layout, both were tools as important as my drill and soldering iron.

Return to Bill of Lading

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.

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.

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

On Saturday, June 6th, 2015, John Barry, David Correia, Clarence Guenther, Shawn Hogan, Robert Hogan, Jim Kinder, John King, Pete LaGuardia, Bill Lyders, Bill Mims, Chris Mitchell, Dave Mitchell, George Meyrick, Bill Mosteller, John Paganoni, Phil Raymond, and Alban Thiery operated on Mat Thompson's Oregon Coast Railroad. A great time was had by all.

Mat's railroad is masterfully done. Until recently, my girlfriend lived in the Pacific Northwest, and I can say with confidence that the scenery completely captures the look of that area: plenty of coniferous trees, hilly, and rugged. See the web site: http://ocrrnet.ipage.com/

My assignment at this session was the Hoyt Street Yard Hostler. Generally, a hostler will move trains from the roundhouse to the ready track for train crews. On Mat's railroad, additional duties include moving freight traffic arriving at Hoyt Street Yard and destined for off-railroad locations to staging, and pulling freight traffic destined for the railroad from staging. Both of these tasks are important for keeping the railroad working -- Hoyt Street Yard mustn't fill up with off-railroad cars or it will freeze, and jobs throughout the railroad depend on incoming traffic. I was particularly pleased because while I was aware of the hostler job from the Achievement Program paperwork, I'd never done it before.

- Bill Mosteller

Coming Saturday, September 12, 2015
Brian Sheron, MMR
Long Island Rail Road, Port Jefferson Branch

Brian lives in Poolsville, MD, and can accommodate 5 people. Session hours are 2:00 PM to 4:00 PM. If you have a Digitrax throttle, feel free to bring it.

Layout information:

Brian Sheron was born and raised on the north shore of Long Island and has fond memories of the Long Island Alco C420 diesels with their 1964 World's Fair paint schemes rolling past his high school in Greenlawn, New York. Like so many others raised in the New York metropolitan area, the imprint of Manhattan is a permanent part of his heritage.

Brian has, therefore, chosen to model the Long Island Rail Road (LIRR), including its connection into Penn Station. The impression, as you turn the corner into the first layout room, is an overwhelming sensation that you are approaching Manhattan. The more you examine the details of the urban canyons, the more you feel like you're in the city, right down to the Sabrett Hot Dog venders.

Brian's layout captures the mainline tracks from East Northport to the Hicksville Divide to Jamaica Station in Queens as the scenery gradually shifts from a suburban to an urban atmosphere. He has extensively illuminated the buildings in the towns of Huntington and East Northport, making for beautiful nighttime scenes. The model of New York City includes a unique cutaway of the LIRR's underground platforms in Penn Station and elevated subway tracks with two sets of circling trains.

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.

Click here to view his 2013 layout tour.

Layout Open House Report
PRR Nassau Division by John Sethian

by Bob Rosenberg photos by Thomas Gaffuri

THE PENNSY IN SPADES

In the event I hadn't mentioned this previously, the most important factors that I consider when writing up any model railroad are relatively simple: Does it replicate the region, area, or time frame that the builder is trying to model closely enough that you feel that you are actually standing there in person? (It also helps if it runs well too, but that's another topic altogether.) My knowledge of the PRR Nassau division is pretty much limited to what I could see from the window of an occasional train travelling the North East Corridor, and most of those trips were long after the 1950's, but the less than esthetic industrialized areas of southern New Jersey have changed little over the years, and John Sethian has replicated it very well. As is so often the case, it's the small touches that make the big differences; the used car lots with models of the cars that he has personally owned, and the models of vintage cars placed around the

layout in general, many of which I recognized (unfortunately) by being able to recall the real vehicles; the prints of paintings by the American artist Edward Hopper, which have been reproduced as part of the scenery and/or the background (there's also an original Grif Teller 1955 PRR calendar as you descend the stairs to the layout room); PRR style stone retaining walls fabricated from "Leggos" covered with spackle; bridges that represent actual structures on the Pennsy in that region; the buildings in the not specified city that reflect the architecture common to the northeast at that time, although the "Starbucks" sign hanging in the window of one of them might be a bit of a stretch; a scenery elevator powered by a TV lifting device, nominally used raise or lower a large flat screen set from behind furniture into viewing position, that's used to raise a large completed section of scenery for access to the area behind it, but when the moving section when it's returned to its usual position the separation points disappear.

The railroad itself was started in 2006 to replace a predecessor three rail O gauge layout. It occupies an "L" shaped space with a duck under entrance area; the main line run is about 150 feet, double tracked in some areas and four tracked in others, a continuously running large circle designed for train watching rather than operation. There's a wide variety of steam, diesel, and electric motive power, including Atlas, MTH, Sunset brass, and a full length (9 car) Aerotrain, all controlled by DCS, the proprietary DCC system developed by MTH. And as for that other topic mentioned earlier, everything ran very well,

which is an advantage with O scale; the additional natural weight of the locomotives and cars mean fewer operating problems. The supporting structures for future catenary are in place but stringing the wires is a project for another day. The scenery is about 75% completed with about a quarter of it detailed. He also keeps detailed journal of all his activities on the layout. This eliminates the need to remember anything (or repeating the same mistakes), as everything is written down. As of December of last year, it had grown to 28 chapters.

Another advantage of modeling in O scale is, in addition to the impressive size of the trains, is the fact that your room space, when filled with such large equipment, is probably restricted to one or maybe two prototype railroads, as opposed to the smaller scales, where the limits of your collection are often restricted only by the limits of your checking account, making you prone to wander off and buy anything that you find tempting, whether it fits in with your modeling goals or not (trust me, I know this). O scale, on the other hand, more or less forces you to stick relatively closely to what you're trying to model. It's especially true when you like to run a GG-1 pulling a long string of full length passenger cars or large P5a electric freight locomotives doing the same with the equivalent freight train, all in a conventionally sized room.

Finally, on those mornings when it's 5:30 am and I'm lying in bed trying, but failing, to get back to sleep, I'll think about John, who is making practical use of those early hours by working in his basement making his PRR Nassau Division railroad even better.

Return to Bill of Lading

Layout Open House Report
Ed Maldonade's Colorado & Maryland

by Bob Rosenberg photos by Marshall Abrams

RAILROADING IN A LARGE SPACE

I often speculate on what I could have done with my model railroad if I just had more space (other than fill it up with more trains). A different design, certainly, and more storage or staging tracks so that trains could be run out and back without tying up my passing sidings as I have to do now, of course. What if I had a room, say, 35' by 48'? Would that be enough to build what I really wanted in a model railroad? Well, I was offered the opportunity to see what could be done with a space that large at Ed Maldonado's home in Adamstown, Maryland, on Saturday, the 16th of May.

His layout nearly fills a basement room exactly that size, with long yard tracks to store trains prior to running them on his three-track continuously operating main line. Although one nominally thinks in terms of the Pennsy when multi-track mains are involved, his railroad follows no particular prototype or era. On that day, he was running a PRR M1 4-8-2, a NS diesel, and a Conrail diesel, pulling long trains of military tanks on flat cars, as would be appropriate to the 1940s and 1950's. He also had five 8' display shelves around the walls that contained an assortment of railroads and equipment styles, plus more still stored in boxes and cabinets (I can identify with those boxes and cabinets). And if that weren't enough, there was a small, separate, N gauge railroad on a 2.5' by 6' board against the wall as well. The railroad is controlled with Digitrax DCC and the locomotives all have sound. There were long, lighted signal bridges over the three track main at various locations that were controlled by switches on the side

of the layout and are used primarily to inform the engineer that he is proceeding on that track in the right direction; Ed felt that wiring them to change when the train passed underneath would be adding some needless complications to a set up that was already complicated enough because of its size. He described the layout as a double folded dog bone that crosses over itself at least twice, and is intended for train watching rather than operational switching or the dropping off and picking up of cars. The rural and small town industrial atmosphere is nicely done using DPM type buildings and kit and/or kit-bashed factories built down a hillside area that slopes into the valley below, a long row of Walther's Flats on the wall behind the yard to give both depth and something of interest to an otherwise bare area along with other indications of a pretty much bygone industrial era. The entire railroad is walk-in accessible, with no tracks to duck under, or anything else to impede the movement of operators or visitors around the layout, a feature that I really appreciate personally these days.

If your primary objective in model railroading is to sit back and enjoy watching long freight trains passing each other in both directions on broad curves with a mix of equipment through realistic scenery, rather than spending your time switching cars back and forth around a small industry or two, then the type of railroad that Ed Maldonado has built is for you. Of course, it helps if you have as large a space as he has in which to build it.

Return to Bill of Lading

Layout Open House
Jim Brewer's Norfolk and Western—Shenandoah Division

When: Saturday, September 26, 2015, 1:00 – 4:00 pm
Where: location is provided to members

The Norfolk and Western—Shenandoah Division depicts 80 miles of the Norfolk and Western Railroad (now part of Norfolk Southern Railroad) along the Shenandoah River between Hagerstown, Maryland, and Roanoke, Virginia. The period is 1956; the transition period of steam and diesel. Hagerstown and Roanoke are represented by eleven common staging tracks, each almost 40 feet long. Interchange is with the Southern Railroad in Front Royal, the Chesapeake Western Railroad in Elkton and the Chesapeake and Ohio Railroad in Waynesboro. The layout takes up two basement rooms, the largest is 93 by 30 foot, 6 inches, while the other is 24 by 20 foot. Bench work is both L-girder and open grid, supporting 3/4 inch plywood, depending upon which worked best for the particular area. Track is code 100 flex track on Homabed. Turnouts are Shinohara with either hand-throws or Tortoise slow motion switch machines. The continuous main line is single track (over 400 feet) with six 15 to 23 foot passing sidings. Two other shorter passing sidings are used by passenger and short local trains. A 12 track yard is located in Shenandoah with smaller yards at Front Royal (Avtex Rayon Plant) and at Waynesboro.

Return to Bill of Lading