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

The Potomac Flyer

Winter 2018

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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: The above entries are all links. Click on the title to jump to the 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

Cover photo: Nick Kalis's Oahu Sugar Company 1944. Photo by Elizabeth Boisvert.

From the Business Car

by Brian Sheron, MMR, Division Superintendent

Welcome Aboard
(*County*: Members)
Arlington: Robert Threeton
Fairfax: Zack Pabis, & Matthew Swayhoover
DC: John Hooper
Montgomery: Charles Hull

Although I'm writing this in early December, you will be reading it after the hustle and bustle of the holidays is behind us. I hope everyone had a wonderful holiday season and got to spend some time with family and friends.

As we head into 2018, we have a number of exciting things planned for the Division. First is the 2018 MER convention. As you know, the Potomac Division will be hosting the convention this year at the Rockville Hilton Hotel in Rockville, Maryland. The dates are October 4-7, 2018, so please mark your calendar. You can register on-line at http://potomac-nmra.org/MER2018/. The hotel registration site will be available in early January.

I have solicited members to help with conducting the MER convention, and I'm pleased to say that many of you stepped up and volunteered your service. When you include the five Board members, the Local Convention Committee (LCC) currently has eighteen members. We met on November 11th, and while most of the jobs are now staffed, we still need some additional help. This is because there are several jobs that require staffing for almost the entire convention. For example, the white elephant sale room requires at least two (and preferably three) people in it at all times. Typically, it is open on Thursday evening, all day and evening on Friday, and all day on Saturday. The volunteers helping with the white elephant sale will work in shifts. Obviously, the more volunteers we have, the shorter everyone's shifts will be and the more time all of our members will have to enjoy the convention. We also need a few more volunteers for our audio-visual team. At the convention, clinics are scheduled starting on Thursday evening, all day Friday, all evening Friday, all day Saturday, and Sunday morning. On Thursday, Friday and Saturday, we have three tracks of clinics. The audio-visual team needs to make sure that in every clinic room, at the beginning of every clinic, the clinician has his or her presentation properly loaded onto the computer, and that they have all of the equipment they need for presenting their clinic. As you can see, this requires a minimum team of three people. And if we don't want this team working throughout the entire convention, we need others helping out to ease the workload. If you would like to help out at the convention, please contact me or any Board member at the e-mail addresses at the front of this issue.

Since the special edition was issued, several members have contacted me with suggestions and have volunteered their services. For example, Nick Kalis has agreed to become the layout tour coordinator, and has already worked his "magic" to schedule layout tours for most of 2018. Nick also has some ideas to encourage member participation, and he will be discussing them at the business meeting.

As I mentioned in November's special edition of *The Flyer*, the high quality of *The Flyer* is due to the efforts of the editor, Marshall Abrams. Marshall intended to take the editor's job on a temporary basis when the then-current editor stepped down only until a permanent editor could be found. We have been unable to find someone to take over the editor's position, and Marshall has been happy to continue on as editor. However, as a minimum, he needs help.

Marshall doesn't want to be a single point-of-failure, being the only person in the Division that has experience in publishing *The Flyer*. Volunteers would get to work with Marshall on soliciting articles, reviewing and improving articles by working with authors, laying out the issue using a word processing or publishing software package, working with volunteer reviewers to quality control the issue, and, finally, distributing the finished issue.

It is always good to have a story with a happy ending, and I just wanted to share this one with you. A while ago I purchased a crossing gate circuit for my layout. This is a rather fancy one with two sets of infrared detectors on each side of the crossing. When the train breaks the infrared beam, the cross buck lights flash, the crossing bell rings, and the gates go down. I did not install it immediately, because it was going on a new section of my layout which wasn't complete at the time. So it was about a year later that I got to install it. All worked well, except once the train cleared the last set of detectors, the bell continued to ring for about 40 seconds (both unprototypical and very annoying!).

I double-checked all my wiring and convinced myself I had wired it up according to the directions. Perplexed, I contacted the manufacturer, Innovative Train Technology Products (ITTP). I spoke with the owner, George Solovay, and quickly learned that George was the entire company. I explained what the problem was, and George first walked me through a trouble-shooting procedure to try and isolate the cause. I did the testing as instructed by George, and, based on my results, he eventually concluded that the bell circuit that came with the crossing circuit was the wrong one. At no cost to me, George sent me a new bell circuit that was properly programmed for my crossing circuit. The crossing bell now works fine.

I was really impressed with how ITTP stood behind its products, was willing to spend a fair amount of time on the phone with me (note, they are located in California), diagnosing the problem, and ultimately resolving it. This is one of the things that I think makes model railroading such a great hobby.

Brian is a long-time model railroader, and models the Port Jefferson Branch of the Long Island Rail Road in HO scale. He earned Master Model Railroader (MMR) certificate number 469 in 2011 and is currently the Superintendent of the Potomac Division, His goal is to make NMRA membership, and model railroading in general, a rewarding and fun experience for Potomac Division members. In the spare time he has, when he's not working on his trains, he enjoys playing bluegrass banjo and plays with an informal group at monthly jam sessions.

Return to Bill of Lading

Nominations for the Potomac Division Board

The Potomac Division Board has appointed Bill White and John Paganoni as a nominating committee for the 2018 Board elections to be held on 24 March 2018. The elections will be held during the meeting at the Hampton Inn in Manassas. Following the 2017 revision to the Bylaws, we elect five Directors to serve two-year terms. Two Directors are elected in even years, such as 2018. The nominating committee requests that anyone wishing to serve on the Board commencing next year contact Bill (<chesbaywatch@comcast.net>, 410-535-4293) or John (<john.paganoni@comcast.net> 703-791-5055) by February 1, 2018. This is an excellent opportunity for members of the Potomac Division to gain experience in managing the Division, gaining insight into the Mid-East Region and its leaders, and the NMRA hierarchy as well. Both Bill and John are available to answer any questions concerning the duties and activities associated with service on the Board.

Notice of Annual Business Meeting

The Potomac Division Bylaws require an annual business meeting for the purpose of electing Board members and conducting other business of the Division. We usually hold the annual business meeting in conjunction with the annual Miniconvention. However, in years that the Division is also hosting the Mid Eastern Region (MER) Convention, we do not hold a Miniconvention because of the workload associated with planning for the MER Convention.

The annual meeting will occur on Saturday, March 24, 2018, at the Hampton Inn, 7295 Williamson Blvd., Manassas, Va. 20109. The meeting will take place from 9:30 am to 12:30 pm. In the afternoon, there will be four home layouts in the Manassas area that will be open for tours.

The business meeting will start at 9:30 am and be over at 12:30 pm. The hotel is providing complimentary coffee. The tentative agenda for the meeting is as follows:

- 9:15 am — Doors open
- 9:30 am — 10:00 am
  1.) Election of Two Board Members
  3.) Vote to Amend the Bylaws
  MER informed Potomac Division that certain language in our Bylaws that was not consistent with the MER Bylaws. Because there are members within our Division who do not have e-mail, they would obviously not be able to be notified electronically of our annual business meetings in which we conduct elections, vote on Bylaw amendments, etc. Each NMRA Division member in good standing has the right to participate in Division business meetings, and thus the right to be notified of when and where those meetings will take place.

  To correct this issue, the Board of Directors is proposing to modify the language in item 3 of Article XII by simply eliminating the word "electronically." This is indicated below with the word "electronically" struck out. The proposed new item 3 would read:

  3. The Election Meeting of the Division will be held at a time and place to be established by the Board each year to hold elections and conduct other appropriate business. Date, time, and location will be communicated ~~electronically~~ to all members at least fifteen days ahead of time. A report of the meeting and the activities of the Division for the preceding year shall be communicated to members following the Annual Meeting in the Potomac Flyer.
- 10:00 am — 10:30 am: Kurt Thompson, Vice-president of the MER, will speak
- 10:30 am — 11:15 am: Coffee break and white elephant sale
- 11:15 am — 12:30 pm: Discussion of member survey and path forward
- 12:30 pm: Adjourn
- 1:00 pm – 4:00 pm: Open House/ layout tours in the Manassas area:
  John Paganoni, Bryan Kidd, Mat Thompson, and Ernie Little

Last November we sent out a special edition of *The Flyer* reporting on the results of the Division survey we conducted last summer, and discussing concerns the Board had about a lack of participation by many of the members in the activities we try to provide. The objective of the

group discussion about survey results and member participation is intended to explore these concerns and hear from the members about possible solutions.

This will be an important meeting, so I urge you to attend.

Return to Bill of Lading

Achievement Program News

by Mat Thompson, MMR

Since 2008, Brian Sheron has been the Division's Achievement Program (AP) Coordinator. In addition to earning his MMR certificate in 2011, Brian has helped many members in the Division by reviewing and, when necessary, judging their work needed for AP certificates, and has been a resource to clarify and explain the AP requirements to many of the members.

Brian is also currently serving as the Division Superintendent, so he had a lot on his plate.

Last October, I was officially awarded my MMR certificate at the MER convention in Harrisburg, PA. and subsequently offered to help Brian by taking over as the Achievement Program Coordinator for the Division. Brian gladly and graciously accepted my offer, and the Potomac Division Board appointed me as the AP Coordinator.

I am delighted! Model railroading is all about models — so what better way is there to see the best in the Potomac Division? I have three responsibilities:

First, I am the local answer guy for your questions about the AP requirements. Having just earned my Master Model Railroader designation, I feel comfortable with that task and have Brian to back me up. Contacting me by e-mail (ocrr@comcast.net) makes it easier for to accurately convey your issue if I need help from Brian or the Mid-East Region Coordinator Dave Chance, or even the National Coordinator. It also helps me build a file of questions and answers.

Second, my job is getting your work judged when you are ready for judging and to verify your submissions for AP categories that don't require judging. Judging can be at NMRA events such as our Mini-cons or Regional Conventions, your home, or some other mutually agreed location. Contact me and we will work it out.

Third, I am responsible for upholding AP requirements. In other words, sometimes I may have to say no, the work presented doesn't meet the standards. If that happens, you will get a precise explanation so you know what needs to be done. Resubmitting applications or having worked judged more than once is a fully acceptable part of the AP process. Your success is important — and so is the credibility of the program. In future AP News articles I will offer advice on how you might make progress on your projects. Of course the best news I could report is you earning AP Certificates and Master Model Railroader recognition.

Return to Bill of Lading

Mark Me Up! — Turnouts and Operation — Part 2

by Mat Thompson, MMR

You might remember from the last Mark Me Up column, we finally got our train configured so we can drop off a car using a trailing point switch. We even thought about where to leave the rest of the train while setting off the car.

Turnouts don't get turned unless there is a brakeman on the ground to do the work.

And then we left the story with two questions. Who throws the switch that moves the turnout? And then, where exactly do you put the car?

Let's tackle who throws the switch first, and immediately explain the least likely model railroading scenario.

Some big layouts have one or more operators working as towermen in heavy traffic areas and yards. Real towermen could see down the track or a display depending on the era. They throw switches with big levers or buttons to get trains and cars where they need to go. This is prototypical but not common on model railroads. As an engineer, you don't actually care. Someone else throws the turnout and you move based on signals or radio transmission.

On Steve Williams' Fairmont, Morgantown and Pittsburgh Branch of the B&O, the towerman uses heavy levers to throw turnouts. Notice the turnout linkage on the ground in front of the tower.

Another scenario is a signaled layouts. On them, the Dispatcher throws mainline turnouts. You proceed according to signals and possibly radio directions. If you are working an area where the Dispatcher controls the turnouts, you call each time you need a switch or the Dispatcher may give you manual control. As part of an engine crew, you follow the signals or the radio directions.

The majority of model railroads use Time Table and Train Order authority. That means you, the train crew, throw the turnouts. On the prototype, some yards might have had switchman, but on a model railroad you are responsible for throwing them and retuning them to the normal position.

If you are part of a two man crew you might want to discuss who does what. On the modern prototype, the conductor is on the ground, the engineer stays in the cab. On model railroads people tend to be a bit more casual, with the crew member closest to the turnout being the one to throw it. That makes sense when aisles are crowded, but it also makes it easier to forget about returning a turnout to normal. Of course, if you are a one man crew, you do it all.

If you are throwing the turnouts, there is another question. How does that little scale guy get from turnout to turnout? The answer is he rides in the cab or caboose between work locations. While switching, he is hanging off a car or standing on the engine footboard while the engine moves between turnouts.

These people aren't athletes. They wear dungarees and heavy boots and walk on ballast. As an engineer, you need to minimize the walk. Pull up to a switch and stop before you throw it, simulating the time the brakeman needs to get off the engine or car and throw the turnout.

Pull cars up to where you think the brakeman is standing before you uncouple a string of cars. Don't work a string of cars that is longer than the line of sight you would have between the engineer and the brakeman on the ground. Andy Sperandeo covered this subject in "People on the ground" in The Operators column in the June 2008 *Model Railroader*. It is a quick and useful read.

Notice the brakeman hanging off the reefer several cars in front of the engine. In the transition era, switching depended on hand signals so the number of cars in a cut was limited by the distance the engineer and brakeman could see each other.

Thinking about this, you will realize switching is a slow process. That's right, real railroading is slow and methodical and even more dangerous if not done in this manner. There is no magic hand to reach over several feet and throw a turnout while the train is still en route.

It's time for a dose of model railroad operations reality. Stopping at every turnout to let a crew member get down and throw the turnout and then waiting after the turnout is returned to normal to get the crew member back on the train is realistic.

It may also be just too slow for the crowd you are operating with. As a new guy, watch what others do. Try to get a sense of how they play the game and adapt to it. When your railroad is finished, you can insist on nothing but true prototypical procedures. Until then, don't work so hard for your model railroad pay that you find yourself without a model railroad job.

I started with two questions. Who throws the switch that moves the turnout? And then, where exactly do you put the car? I hope the first is now answered. The next Mark Me Up will tackle the second.

Engineers and Firemen 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

Earning Merit Awards for Cars and Structures
Part 3: Lessons Learned — Cars

by Mat Thompson, MMR

Part 1 of this series explained scoring matrices judges use to rate cars and structures for Merit Awards. It appeared in the Summer 2017 of the Potomac Flyer (http://potomac-nmra.org/). You can see all the matrices by referring back to that article.

Part 2 (Fall 2017) used pictures to show the points awarded (or not awarded) for several of my structure models.

This final article takes the same approach with Merit Award judging for cars.

- Eight cars are needed to earn the Cars Certificate.
- There must be four different types of cars.
- One car must be a passenger car.
- Four cars must be scratchbuilt.
- Four cars must be superdetailed.
- Four cars must earn Merit Awards. They can be any combination of scratchbuilt and superdetailed models.

A model needs a total score 87.5 points or more out of a possible 125 to receive a Merit Award.

Category	Factor	Point Range
Master Builder Motive Power	Construction	0-40
Master BuilderCars	Detail	0-20
Master Builder Structures	Conformity	0-25
	Finish & Lettering	0-25
	Scratchbuilt	0-15

As with earning the Structures Certificate, meeting the requirement of building superdetailed models for the Car Certificate probably isn't difficult for hobbyists involved enough in modeling to be interested in becoming Master Model Railroaders.

However, earning a merit award for a superdetailed kit, even if well constructed, is difficult to do. Consider the judging results my Branchline Coach kit received.

In terms of **Construction**, as a kit it is only somewhat complex since the manufacturer provided the car body with sides and ends as a single piece. The body piece came with window and door

openings, drilled holes for proper placement of ladders and stirrups, and the body's rivet detail cast into the car sides.

MODEL:	Coach – Branchline Kit			SCORE: 72
Factor	Points		Good	Bad
	Possible	Awarded		
Construction	40	21	Very good, widows excellent	Somewhat complex as a kit – would be highly complex if scratchbuilt
Detail	20	14	Well done underbody	
Conformity	25	14		Kit underbody inconsistent with diagrams
Finish & Lettering	25	19	Good paint and decals	Simple paint scheme
Scratchbuilt	15	4		Kit –windows features are only scratchbuilding.
Comments	Well detailed kit, but because it was a kit, construction was not complex and little scratchbuilding			
How to increase score	Adding coupler cut lever bars and coupler yoke safety chains would have added detail and improved conformity.			

Detail and **Conformity** both lost points because the few parts I did not add were chains and other very fine details. If I had understood the scoring process better, I would have worked harder to add them, but they were so difficult to add neatly that they may well have detracted from the model's final appearance.

TIP: Detail the underside of the car, whether it is kit built or scratchbuilt. Judges expect it — and it's a good place to add details.

I did spray paint the car, add decals, and lightly weather the car's lower body, underside, and trucks. Considering the car's simple paint scheme, my score for Finish and Lettering was good. However, many superdetailed kits come with the body painted and lettering already done, so you can only earn points for weathering.

My model received a few **Scratchbuilt** points because I made the decals and window shades. Many superdetailed kits don't leave much opportunity for scratchbuilding unless you discard parts and make your own.

The total possible points is 125. My model was awarded 72 points. Adding a few more detail parts might have raised the score but it is hard to see it reaching the 87 ½ points needed for a Merit Award. Virtually any kit limits the **Construction** and **Scratchbuilt** factors to such a degree that 25 to 35 points are out of reach even before building the model begins. For that reason, except possibly for some resin kits, earning a Merit Award for a kit-built model is uncommon.

Even thought the coach did not receive a Merit Award, it did count as a superdetailed model and fulfilled the requirement for building at least one passenger car.

Building a kitbashed car can increase the complexity of **Construction** and add the opportunity for **Scratchbuilt** parts. My model of Northern Pacific Boxcar 39538 is a kitbash of a Bowser kit based on a photo of the prototype car.

MODEL:	Boxcar – Kitbash			SCORE: 81/92
This car was judged and then, after additional work, was judged again – scores show the initial points and points from the second judging				
Factor	Points		Good	Bad
	Possible	Awarded		
Construction	40	25/31	Bowser kit with openings cut for doors, molded on detail removed and replaced	Only moderately complex
Detail	20	15/14	Well detailed, including underbody	
Conformity	25	18/20		No air hoses or retainer valves
Finish & Lettering	25	18/18	Excellent weathering and tarred roof – provided color photo of prototype	
Scratchbuilt	15	5/9	Discarded kit underbody and made new underbody with extensive piping, created and printed additional decals	
Comments	This kit was built, painted, decaled, and weathered to match a color photograph of this car to include the load.			
How to increase score	Add air hoses, retainer valves, scratchbuild walkway			

TIP: If a car does not achieve a Merit Award score, consider additional work on the model and then have it judged again.

Even though kitbashing did earn me a Merit Award, I still needed three more Awards and still needed to complete four scratchbuilt cars to earn the Cars Certificate. I decided to earn the Merit Awards with scratchbuilt cars.

It has been a test of my modeling skills for several reasons. I had never scratchbuilt a car conforming to the NMRA standard, which is that 90% or more of the pieces used to build a scratchbuilt car must be fabricated from basic materials like stripwood and scribed siding. That severely limits the use of commercial parts (trucks, couplers, and brake appliances are not counted as commercial parts for judging purposes).

I don't have specialized tools such as precise measuring instruments or skills using metal working tools, which made it hard to duplicate any prototype car features. Examples are latches, grab irons, stirrups, intricate ladders with curved pieces, many types of car ends, and many types of car doors.

My first scratchbuilt car was a disaster. The judges noted the car wasn't square, paint obscured the individual board siding, underbody detail was not complete, and it had too many commercial parts to be considered scratchbuilt. I lost the score sheet but I think this model got around 60 points.

The results were disappointing, but as I reviewed the judging matrices I understood the judges' assessment was correct, maybe even generous. Still, two good things came from my efforts. First, as bad as it was, I did get credit for a scratchbuilt car. Second, my next models were better because of the lessons I learned.

One key was to find clear, understandable car plans and photos. I needed them to build a model and the judges needed them to evaluate my work. Surprisingly, many of the plans in the hobby press were not detailed enough to model a car. The weak point most often was the interlacing of piping, cables, and wires on the car underbody. I ended up using kit plans because the detail was so much better.

TIP: It is fully acceptable to use the instructions and drawings from a kit to build your models. The Kalmbach book *Detailing Freight Cars* by Jeff Wilson has generic diagrams for brake systems and underbody detail that are easy to follow and good prototype documentation—see page 23.

I also choose to build older wooden cars. They tend to be board construction, which is more like structure modeling than newer metal cars. Board construction means the car will have many parts which added to construction complexity and increased the number of commercial parts I could add to the models.

S.R. & R.L. Boxcar 52 is an On2 model, not what I normally model. I chose to do it because the older construction style made it easier to fabricate parts and because I had very complete car diagrams. My goal was to demonstrate modeling skills worthy of a Merit Award, not to populate my layout.

MODEL:	Boxcar – Scratchbuilt			SCORE: 101
Factor	Points		Good	Bad
	Possible	Awarded		
Construction	40	30	Interior, sliding doors	One end has poorly aligned roof and roofwalk
Detail	20	16	Underbody detail	
Conformity	25	22	Closely adhered to prototype	
Finish & Lettering	25	18		Simple lettering and single color
Scratchbuilt	15	15	Car has almost 400 parts, 16 are commercial parts	
Comments				
How to increase score	More care in making car square			

After receiving a Merit Award for the On2 boxcar, I still needed two more scratchbuilt cars and two more Merit Awards to complete the Car Certificate.

Using plans from long-defunct Taurus Models, I built two stockcars simultaneously, Oregon Short Lines 1250 and Oregon Short Lines 1252. Remember that the requirement to build eight cars also only requires that you build four different types of cars.

Both cars received a Merit Award but notice how losing just a few points in each factor brought down the cumulative score. Having the knowledge of how the factors related helped me to keep all the scores within the needed range.

MODEL:	2 Stockcars - OSL 1250 & OSL 1252 – Scratchbuilt			SCORE: 101/98
Factor	Points		Good	Bad
	Possible	Awarded		
Construction	40	33/33	Each car had over 300 individual parts.	Used commercial grab irons. Roof and walkway not quite square on OSL 1252
Detail	20	13/13	Underbody detail	Coupler cut bars not properly modeled
Conformity	25	23/20	Closely adhered to prototype	OSL 1252 - No documentation for arch bar trucks
Finish & Lettering	25	19/19		Simple lettering and single color
Scratchbuilt	15	13/13		
How to increase score	More care in making car square, make grab irons from wire			

Here is what I learned building models for the Structure and Car Certificates:

- Read the AP Judging Guidelines for Motive Power, Cars, and Structures.
- Have one or two models judged early to understand the judging process.
- Construct the scratchbuilt models first. Even if they don't earn Merit Awards, they help fulfill the requirement for scratchbuilt cars and for superdetailed cars.
- Be aware of how the judging factors are related and build your models to take advantage of that relationship.
- Document model construction with pictures from start to completion. With photos it is much easier for the judges to see how you built the models and give you credit for your work.

If, like me, you are a decent modeler but not a superb modeler, earning Merit Awards will stretch your skills. And that's exactly the point of the Master Model Railroader program.

Return to Bill of Lading

RPM Valley Forge

by Dick Foley

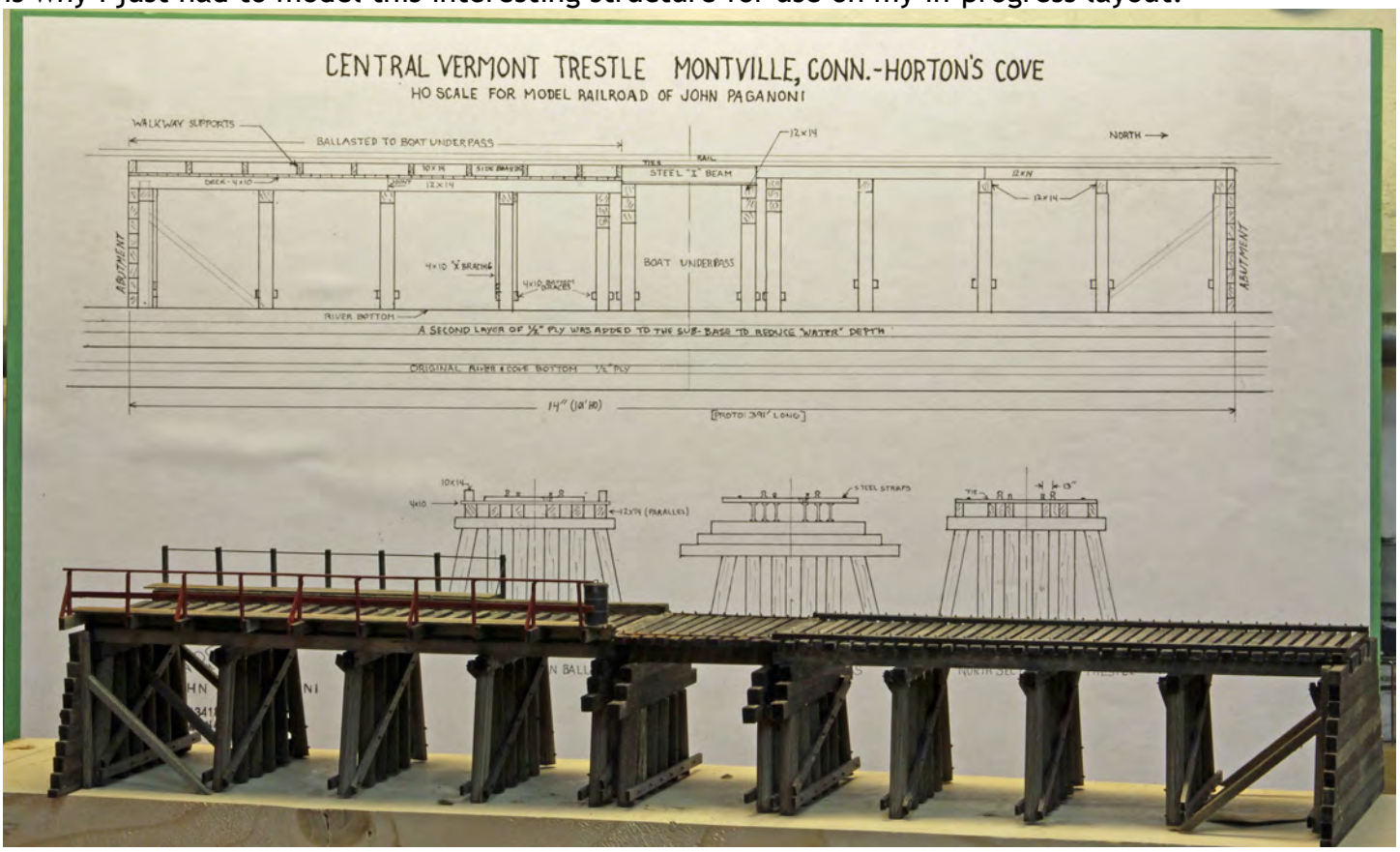
The Railroad Prototype Modelers Valley Forge will be held March 23-25, 2018 at our usual venue, the Desmond Great Valley Hotel in Malvern, Pa. The committee is planning on having approximately fifty clinics on a number of prototype-related topics, (new clinicians are always welcome, so please contact Jim Dalberg: jedalberg@aol.com).

Operating sessions will be held both Thursday evening and Friday morning. Clinics begin Friday evening at 7:00 pm. There will be a vendors' room, which has always been popular, and a model display room for attendees. Sunday afternoon there will be layout open houses. For information and a registration form go to: www.rpmvalleyforge.com. This RPM is being sponsored by a 100% NMRA club.

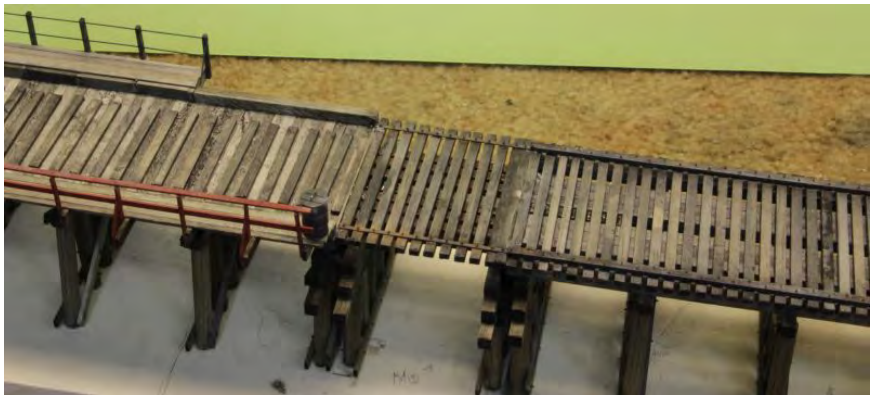
Central Vermont Railway Montville Trestle

Model by John Paganoni Photos by Mat Thompson, MMR

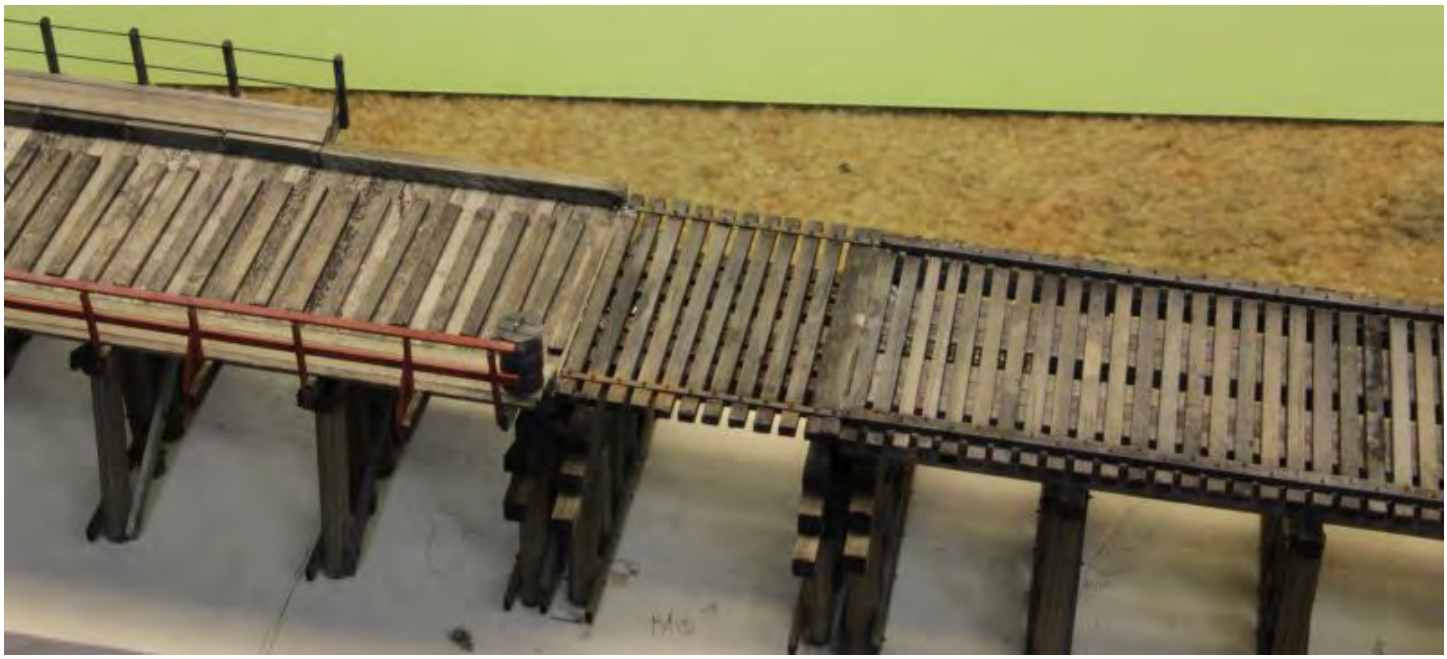
Model railroading provides a wonderful opportunity to capture memories of the past and put them in a 3-dimensional view that keeps those great moments of the past alive. The Montville (Connecticut) Trestle is one of those structures that has always remained in my memory bank because of the happy times I recall when steam engines, sometimes doubleheaders, came rumbling across the trestle bound for New London, Connecticut or as far north as St. Albans, Vermont. A lot of switching also occurred over the trestle as the local set out and re-built trains from cars servicing the Robert Gair mill on the Thames River and the mills on up the Palmertown Branch. This is why I just had to model this interesting structure for use on my in-progress layout.



The trestle is unique as there are three distinct engineering construction sections on this trestle. The south end, where the railings are, is a ballasted section. This construction may have been selected as the rails curve to the left just as they leave the trestle, maybe dampening the forces caused by the curved track. The mid-section is a boat underpass for river traffic going from the Thames River into and out of Horton's Cove. This



section has 6 “I” beams supporting the span, one set being directly under the rails. The third section is a “traditional” wooden trestle.



The model is significantly compressed and is 14 inches long or a scale 101 feet. The prototype is 391' long. Except for the styrene “I” beams, Grandt Line N/W/B's (a total of 446 of them), a couple of strips of styrene strapping in the ties over the boat underpass, and a couple of .015" brass rods for the short handrail, the model is entirely scratchbuilt from scale wood. The bents are 3/16" dowels scribed with a Zona saw. Staining is primarily Micro-Mark Bridge & Tie Stain. The red hand rail is painted using Floquil Caboose Red thinned.

Next, while the trestle is still on the workbench, some barnacles need to be added on the pilings. Last, after installation on the layout, rails will be laid and guard rails installed. The final test will be to run a Central Vermont N-5a Class consolidation model across the trestle.

Return to Bill of Lading

John Paganoni grew up never out of sight of the Central Vermont Railway in the days of steam. He lived in Montville, Connecticut where there was a lot of activity for the paper mills and fabric mills in the late 1940’s to mid-1950’s. A lifetime objective was to try to capture the CV in those days of steam in HO scale; and John was fortunate enough to gather enough historical information to draft scale drawings of all the major CV facilities between New London, Connecticut, and Montville. He is in the process of building a very compressed layout to feature the main interest items that recall the CV’s “Golden Years.”

Finding Unique Vehicles for your Layout

by Brian W. Sheron, MMR

1956 Chevy Nomad from American Excellence

1963 Plymouth Valiant from Road Ragers

1957 Chrysler Imperial from American Excellence and a 1957 Plymouth from Woodland Scenics

As a long-time modeler of the Long Island Rail Road (LIRR) in HO scale, my layout contains many urban scenes, from the main street in the heart of Huntington Village 40 miles east of New York City in suburban Long Island, to Flatbush Avenue in Brooklyn, to downtown Manhattan. Capturing the hustle and bustle of these urban areas requires modeling congestion. Two key elements of congestion are people and vehicles.

There are many manufacturers of HO figures, and even though it may be necessary to use the same figure over again in several parts of your layout, viewers rarely concentrate on a particular figure and remember that they saw the same figure a few feet away on another part of the layout.

Vehicles, on the other hand, are a bit different. They are bigger, and thus more noticeable. They also have specific, unique body styles and colors that allow the viewer to more readily distinguish one vehicle from another. Thus, in addition to placing a lot of vehicles on your layout to give the feeling of urban congestion, another objective with placing vehicles on your layout is to have a good variety of makes, models, colors, and body styles, so the viewer is not seeing the same couple of cars over and over again as they look around your layout.

Finally, yet another constraint is making sure that the cars are suitable for the era you are modeling. In other words, if you are modeling the steam-to-diesel transition era, you probably only want vehicle models from the late 1940's through the mid-1960's.

At the recent MER convention sponsored by the Susquehanna Division in Harrisburg, Pennsylvania, I presented a clinic on Urban Modeling. While my clinic focused on explaining the elements that go into modeling an urban scene, I used several photos from my layout to illustrate what I was talking about. In some of these photos, many of the vehicles on my layout were visible.

After I finished the clinic, a friend from another division came up to me and said "Where did you get all of those 1950's and 1960's cars?" [note: I originally set the time period for my layout at 1964, but when BLI came out with the LIRR H-10's with DCC and sound, I bought a bunch and decided that when I ran the steam engines, I would dial the date back 10 years to 1954!]

1950s Willys Jeep & 1958 Buick Station Wagon, both from American Excellence

1958 Dodge Coronet from American Excellence

I responded by telling him that I have been collecting the vehicles on my layout for over 30 years, and that I now probably have on the order of 300 or more vehicles. What he was interested in was that many of the vehicles are not the routine ones you see being sold in hobby shops or at train shows. Unfortunately, I didn't have time to run through all of my sources with him.

Early 1960's Ford Falcon from Road Ragers

When I got back home after the convention, I sent him an e-mail listing all of the sources of my HO scale model cars that I could think of (and remember). After I sent it, I thought that perhaps this information would be useful to some of our Division members. Therefore, the purpose of this article is to provide a list (hopefully comprehensive, but I by no means claim it is complete) of sources for scale model vehicles, in particular, vehicles that are usually not available in hobby shops or train shows.

1950's DeSoto from Eko

Some auto models come without windows. Microscale Kristal Klear and Testor Model Master Clear Parts Cement (part # 281217) can be used to make small windows in small openings. To do this, apply to the edges of the window with a tooth pick, and it sort of closes in on itself. Many white glues behave similarly.

American Excellence—this is a company that has an internet web site and has vehicles in all scales. The web address is https://www.american-excellence.com.
They have many unique cars, but is seems that once they sell out of a particular car, it is gone. They occasionally put some of their cars on sale, so if you are interested in finding unique cars, it is best to check this site periodically. Click on "advanced search" and then select the scale, type of vehicle and decade you are interested in, and the site will pull up only those particular vehicles. Examples of some cars that are available are a 1958 Buick station wagon, a 1957 Dodge (with the fins!), a 1956 Chevy Nomad, and a 1957 Chrysler Imperial.

1950's Austin Healy from Wiking

1956 Buick from American Excellence

eBay—This is one of the best places to find unique scale autos. The first thing to do is to go to "Toys and Hobbies" and then to "Model Trains" and then to whatever scale you are interested in (e.g., HO). Now, the trick is to know what key words to type in for your search! Below are various manufacturers that are either still in business or out of business, but cars they manufacture or manufactured are still occasionally available. Here are some key words that should pull up available vehicles:

Road Ragers—this is a company in Australia. I have found a number of hard-to-find HO scale American cars on this site, such as a 1963 Plymouth Valiant and Dodge Dart, and 1960's Ford Falcons. The cars are reasonably priced (~$13-$14 each) but shipping (~$13) is a bit steep.

Williams Bros.—Williams Bros makes a number of HO scale 1960's and 1970's automobile and truck kits. The are cast in clear plastic and need to be assembled and painted. Because they are cast in clear plastic, the windshield would not be painted and would remain clear. I have a couple of 1964 Pontiac GTO's on my layout made from Williams Bros. kits. Examples of other kits usually available on eBay are a 1953 F100 Ford pickup, a 1956 Ford sedan, and a 1957 Ford T-Bird. Prices are usually in the $10 range plus shipping.

1958 Cadillac from American Excellence

Alloy Forms—Alloy Forms makes HO scale cast metal cars. They have a number of models from the 1950's and 1960's that are not available from any other manufacturer. Some examples are a 1959 Chevrolet convertible and a 1956 Buick convertible. Alloy Forms models do not come with a windshield or windows, which can be made using the products mentioned previously.

Athearn—Some time ago, Athearn made an HO plastic station wagon kit that looks like a 1957 Plymouth. These occasionally show up on eBay. They have cast plastic bodies with a clear plastic windshield and window insert. The cars need to be assembled and painted. They are usually in the $10 per car range plus shipping.

Woodland Scenics—Woodland Scenics makes a number of 1940's through 1960's autos and trucks, usually packaged with other items and intended to make a mini-scene. These are nice cars, and I occasionally see them up for sale on eBay. A good example is a 1957 Plymouth Fury. These usually run in the $15 -$25 range plus shipping.

Classic Metal Works—Classic Metal Works makes a wide variety of autos and trucks in HO scale. Many of their early runs have been discontinued and can be hard to find. They frequently show up on eBay.

Malibu Classics/Model Power—back in the 2000's, a company called Malibu Classics was making beautiful HO scale model cars. You could by these in Walmart for about $2 a car. A few years later, the same models were being marketed by Model Power at a higher price. These vehicles frequently show up on eBay.

Neo—There is a European company called Neo Models, which sells vehicles in a variety of scales. Their web site is http://neoshop.replicars.nl. The HO scale autos are mostly European, but they have a few American models from the 1970's. Price is in the $20-$30 range for HO. eBay is your best bet for finding out-of-production HO cars.

Eko—Probably 10+ years ago there was a company from Spain called Eko that sold inexpensive HO scale vehicles of American design from the 1950's and 1960's. They were inexpensive, and did not have the fidelity of models we can buy today, but they were relatively accurate and looked fine, especially if you painted the headlights, bumpers and other parts that should be chrome silver, and the taillights red. Searching the internet, I'm not sure if they are still in existence, but seem to have left the HO scale auto business and began concentrating on HO scale military equipment. Eko vehicles frequently show up on eBay. Prices seem to vary considerably from perhaps less than $10 to around $30 per vehicle plus shipping.

Viking, Brekina, Herpa, and **Busch**—These companies all make HO vehicles and in addition to being sold on eBay, are also in the Walthers catalog and are sold at model railroad hobby shops as well.

Hot Wheels—While many Hot Wheels vehicles are too large for HO, Hot Wheels does make a line of vehicles that are HO scale. Type in "Hot Wheels 1:87" or "Hot Wheels HO scale" and occasionally some cars or trucks will show up for sale that are 1950's or 1960's vintage. The drawback is that often they have a candy apple paint job on them, and the tire rims do not look prototypical. However, wheels and rims can be replaced or the rims painted a dark color so they are not noticed. I found a Hot Wheels HO scale 1964 Ford Galaxy on eBay which looks very prototypical.

Ricko—Ricko manufactures scale model vehicles, and has a number of American car models from the 1960's and 1970's. They frequently show up on eBay and run in the $20 - $30 range plus shipping. Ricko also has a web site http://www.rickoricko.com/products87.php. Some examples are a Jaguar XKE, Mercedes 190 SL, and a 1963 Lincoln Continental convertible.

Return to Bill of Lading

We'd Like You to Meet: Zach Pabis

by Roger Sekera

For those of you who have followed this column over the past four years, I am proud to announce that Zach is the youngest person highlighted so far; he is a 16 years old, attending Flint Hill School. A lifetime resident of the greater DC area, Zach evolved into model railroading largely from the world of Lego, which he still enjoys.

While he admits to a changing and growing focus, currently he spends a lot of his efforts on the Seaboard Air Line in the transition era. "I just liked their locos and passenger operations." Particularly, he finds their Baldwin centipedes fascinating. Also because he has limited space, he mostly uses modules. "I also found out that running trains on a larger layout comprised of several modules in a show setting is a lot better than what I could do in my limited space," i.e. an empty home office. "Model railroading has so many different parts, and there are parts inside these parts. All that allows the modeler freedom."

"I have my own 3D printer which I use in many of my models. This has proved to be a valuable tool that saves me plenty of time." Zach is a member of the Northern Virginia Model Railroaders (www.nvmr.org), joining just after his 14th birthday, the minimum age to become a junior member. With NVMR he has played a major role producing videos of the layout in operation with his 3D-printed camera car. That large layout is a good platform for operations.

He does wish that more "kids my age were in the hobby," and that some of the paints and glues were not as toxic, but this is an early-stage modeler with a lot of track — and promise — in front of him.

Do stay tuned.

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

What's in that name - Goodyear Chemical Division

by Nigel Philipps

The photograph is the Goodyear Chemical Division tanker at the B&O Museum in Baltimore, taken this summer. Built in May 1923, it was used for transporting latex, one of the raw materials used in the manufacturing of tires. The Chemical Division prepared and supplied the materials used in the manufacturing of Dunlop products.

This episode of “what's in that name?” is another international story, and there is the usual mix of international and national shenanigans. Goodyear is of course synonymous with automobile tires and blimps. Most of us have had their tires on our vehicles at some time (add in Dunlop and Kelly tires, Goodyear makes those in the U.S. as well), and listened to the sports commentary from the overhead blimp. So how did a man named Goodyear get into the tire business using a product from the Far East in a place that is about as far from the sea as you can get in the U.S. — then proceed to found a technical university, build and manage nuclear power plants, get into the aircraft and aerospace industries, develop protective film barriers for the processed food industry, and become an international leader in polymer technology? It turns out he had nothing to do with any of it, but read on.

Charles Goodyear, commonly regarded as the inventor of vulcanized rubber[1], was only part of the story of how rubber could be cured to give a stable product. He would probably have been quite bemused by how his serendipitous observation turned into a multi-billion dollar industry, especially as he never had anything to do with tires for automobiles (or even automobiles). Goodyear was born in New Haven, Connecticut, on December 29, 1800. He bounced into the rubber business in the 1830's after his father's hardware store (in which he was a partner) went bankrupt. Rubber

1 Who gets the prize for discovering vulcanization? The honors for this should probably go equally to Thomas Hancock, who actually came up with a controlled process, and to Charles Goodyear. Consolation prizes to Nathanial Hayward and Freidrich Lüdersdorf who recognized that sulfur was part of the story. Honorable mention goes to William Brockedon who had first pointed Goodyear’s agent Stephen Moulton in the direction of Charles Macintosh and Company with those rubber samples. And who incidentally came up with the term “vulcanization”.

originally came from the latex-rich sap of the rubber tree (*Hevea brasiliensis*) in the Amazon jungles of Brazil, and was the foundation of an economic "get rich quick" bubble complete with "rubber barons" (and their subsequent financial failures) in the 1830's. The latest "miracle material," it was being used to make anything from boots to life preservers. Manufacturers quickly found that out that it melted and fermented in the summer heat, and cracked in cold weather.

Fortunes made on rubber investments were being lost even faster. Goodyear's quest (some would call it a clinical obsession) to find a way to stabilize rubber and make a fortune started with a visit to the Roxbury India Rubber Store in New York in 1834, when he decided he could come up with a better valve than the one being used for life preservers (jackets). On returning to the store with the improvement, he was shown the warehouse where the life preservers were melting in the summer heat, and told he should invent a better use for rubber, not a new valve. He decided to do just that — to the detriment of pretty much anything else.

A 19th century inventor with no scientific training, he proceeded to subject himself, his wife and 12 children to years of penury and starvation, ill-health, bankruptcy, and homelessness, often living in abandoned factories, along with a couple of spells in debtors' prison. There was the occasional respite when investors were sufficiently interested in his work to take a gamble and fund the latest fad, but most of his early "inventions," using rubber as a basis for materials, proved unworkable and the products unstable (life preservers and mailbags for example). Any income was promptly invested in manufacturing facilities and ventures that quickly failed, and rarely used to pay off debts and loans.

Goodyear had help from some good friends and fellow inventors, especially a Mr. Nathanial Hayward, who had discovered the combination of sulfur and heat on stabilizing rubber (called "solarization"[2]). Goodyear started to look at the effect of sulfur on rubber after first suggesting to Hayward that he patent the observations, and then obtaining the rights to the invention. The discovery came about in the winter of 1839. The story goes that Goodyear was sitting one night by the fire with some friends after a day of kitchen table, stove, and sink experiments. The crockery, pots, and pans were used for his experiments involving uncured rubber, sulfur, white lead, turpentine, and other noxious and toxic materials. After a quick rinse, or more likely wipe with a cloth, they were used for cooking and eating (unless they were currently in the local pawnshop, an oft-repeated occurrence). He accidentally dropped a lump of rubber mixed with sulfur and white lead that he had been kneading onto the fire. Other contemporary reports state that it was thrown into the fire in a fit of anger. It charred and gave a pliable and temperature stable material. A method for curing rubber into a stable material by a combination of sulfur and heat had at last been discovered as a chance observation — although that should be amended to perhaps or maybe, as subsequent events showed.

Goodyear had been sending samples of the heat-treated rubber to various companies in the rubber business before applying for a patent in the hope of attracting investment (and thus completing the studies to make his discovery work — "reduced to practice" as the patent office likes to say). One of these was Charles Macintosh and Company in the United Kingdom, which received samples of the new material in 1842. They were understandably reluctant to invest £50,000, Goodyear's asking

2 Charles Macintosh and Thomas Hancock were both successful inventors and businessmen, definitely not the best combination to send stabilized rubber samples to without patent protection. Thomas Hancock did not start work on finding a way to stabilize cured rubber until after the death of Charles Macintosh in July 1843 and a lack of patent protection from Dunlop. He had the foresight to vary the amount of sulfur used, this giving rise to a range of rubbers with varying degrees of hardness. He apparently never used white lead, which appears to play no role in the vulcanization process. Goodyear probably used it to get rid of the tan color of cured rubber.

price for the secret (nearly £5 million today), in a yet-to-be-proven technology with no details on how it was to be made. Charles Macintosh and Company repeatedly asked Goodyear to take out patent protection so they could proceed. These requests were ignored (not surprisingly, Goodyear had no money to do any of the necessary studies), and they set out to discover the secret of stabilizing rubber themselves.

Charles Macintosh had been working with rubber and manufacturing rubber goods since 1792, and Thomas Hancock, a partner in the Company, since 1825, and both had a strong background in experimentation, understood the value of patents and secrecy in the invention process, and were both astute and principled businessmen. Not surprisingly, this was achieved after some very detailed, methodical, and exhaustive experimentation in secret by Thomas Hancock, in his private laboratory, and a demonstration that the process would work (the crucial reduction to practice). Mr. Hancock filed a very comprehensive patent for the vulcanization of rubber in November 1843 (without white lead, one of the principal ingredients in Goodyear's patent), eight weeks before Goodyear's patent was filed in the U.S. in 1844. While Hancock's invention had been reduced to practice and could be used for manufacturing (using some of his and Charles Macintosh's previous inventions for handling raw rubber), Goodyear's almost certainly had not. He appealed against the award of the U.K. patent, refused a half share in the patent offered by Charles Macintosh and Company to end litigation, and lost his fight. Goodyear, by waiting too long to file his patent, not paying attention to secrecy, and refusing the magnanimous offer of a 50% share in the U.K. patent, lost access to the very important and lucrative U.K. market.

This failure to reduce an invention to practice was a major problem that would haunt Goodyear for the rest of his life. It took Goodyear until 1843 to work out the details of composition and temperature, and for the latter he required an oven with accurate controls. Goodyear persuaded the owner of an adjacent shoe business, Horace Cutler, to invest $300 to pay for the new oven, and struck a deal, where Goodyear would supply the rubber for the shoes — which he did, only for the rubber to fail after curing. Cutler wanted his money back. The process clearly did not work, and Goodyear was — as usual — broke. Cutler sold the shoes, along with the secret of manufacturing the cured rubber, for $50 to a Mr. Horace Day. Day filed his own patent on the new product, which was rejected, and subsequently infringed Goodyear's patent by manufacturing and selling rubber goods (including “shirred” materials in which a thin layer of rubber was fused between two layers of cloth and heated). The only people to get rich from this were the lawyers representing Goodyear and Day.

Goodyear spent many years and most of the income from his invention licenses, plus money he borrowed, fighting other inventors and patent infringements. He also publicized his inventions and rubber products at various international exhibitions (the big “must attend” trade shows of the 19th century, $50,000 a spot, about $1 million today), and he died in 1860 in debt to the tune of $200,000.

Frank Seiberling founded the Goodyear Company in Akron, OH, in 1891. He named the company in honor of Charles Goodyear, who had died 31 years earlier. Production of bicycle and carriage tires, horseshoe pads, and poker chips (all made of various grades of cured and stable rubber), started at the end of that year. By 1915 Goodyear was the largest manufacturer of automobile tires in the world. The rest, as they say, is history.

Some light reading for those interested beyond Wikipedia:

- **Why America Has Stopped Inventing?** By Garin Gibby. Morgan James Publishing, New York. 2011. ISBN 978-1-61448-048-8.
- **The Hancocks of Marlborough: Rubber, Art, and the Industrial Revolution — A family of Inventive Genius.** By John Loadman and Francis James. OUP, Oxford. 2010. ISBN 978-0-19-957355-4
- **Trials of an inventor: life and discoveries of Charles Goodyear.** By B.K. Pierce. Carlton and Porter, New York. 1866. Google ebooks.
- https://www.gracesguide.co.uk/Charles_Macintosh_and_Co for a quick summary of Charles Macintosh and Thomas Hancock.
- The Goodyear Company. The Corporate website has a timeline history. See "Our Company" at https://corporate.goodyear.com/

Return to Bill of Lading

Nigel Phillips models in 4mm scale (18.2mm standard gauge and narrow gauge), and 7mm scale narrow gauge. He builds his own turnouts (at $5 a pop it's a lot less expensive than RTR), and build/solder white metal locomotive kits, as well as scratch building in brass.

His primary railway modeling interests lie with the Great Northern Railway, circa 1924 (steam and electric) and 1955 (steam-diesel transition). His other railway modeling interest is the Great Western Railway (GWR) in the UK, 1945-1960. This covers the nationalization of the railways and the death of "private owner" freight cars ("wagons," "vans," tankers) after 1947.

Some Thoughts on Preparing and Presenting Clinics

by Brian W. Sheron, MMR

For those of you that attend model railroading conventions, train shows, etc., you know that a key feature of all these events is clinics. Clinics are presentations, usually about an hour long, that focus on a particular aspect of the hobby. They can be simply informative, such as presenting a history of a specific railroad, providing a detailed description of a specific industry that interacts with railroads (e.g., containerized cargo), or they can be instructive, such as how to weather freight cars, how to install a decoder, etc.

Making a presentation at a convention or other model railroading venue can be fun and it also adds yet another dimension to this diverse hobby. The main purpose of clinics is to impart your knowledge of a particular area to others. For many of us that have been in the hobby for a number of years, we have learned a lot of things. Some by accident, some the hard way by making mistakes, and some by doing in-depth research into a subject. Being able to pass this knowledge on will help others as they progress in the hobby. However, no matter how smart you are on a subject, in order to present it to an audience so that they learn from you and leave with a clear understanding of what you have told them, your presentation must meet certain criteria. And this is not just true for model railroading presentations. It holds equally as well to other hobbies and the business world as well.

First, you need to identify what the objectives of your clinic are. Second, you need to identify the material that you want to present that will achieve the clinic's objectives. Third, you need to

organize that material in a coherent, orderly manner so that it leads the audience, in a logical progression, to the clinic's objectives within the allotted time. Fourth, you need to make sure both the material and the presentation are interesting and entertaining and will hold the audience's attention. The objectives can be put into two basic categories: Content and Delivery. I will discuss each of these in more depth.

Content

Clinic Objectives: In order to define what your clinic's objectives are, ask yourself, "What information or conclusion do I want the audience to take away with them when the clinic is over?" Identify these objectives at the start and write them down. As you prepare your clinic, constantly refer back to them to make sure you are staying on target and not going off on a tangent, or dwelling on one aspect too much. It is a good idea to state the clinic's objectives on slides at both the beginning of the clinic, and then again at the end of the clinic, to remind people what they should be taking away from the clinic.
Material for Presentation: Once you have identified your clinic objectives, you need to identify and collect the information you need to present to form the foundation for your clinic objectives. For example, if your clinic is focusing on new modeling technique, the first thing you should consider is what has been done in this area previously. In the technical and scientific worlds, this is called a literature search. If you are presenting a modeling method that you discovered or perhaps modified and improved upon, don't just jump in and start describing it. Do some research and identify what similar methods exist and have been reported. Perhaps briefly discuss what you see are their pros and cons. This will help set the stage for explaining why you believe your approach is better, or at least different. If you are providing an overview of a specific railroad, or perhaps an overview of an industry that serves a railroad, don't automatically rely on one source for your information; find more than one source on the topic.

Now that you have content for your clinic, you need to identify the individual elements associated with the clinic's objective, and how each element contributes to the objective.

Organize Your Material: The last thing you want to do is slap together a bunch of information in an incoherent, haphazard fashion on a bunch of slides. You will quickly lose the audience, because they will be unable to follow how the material being presented logically contributes to the clinic objectives.

The best way to organize your materials in a coherent manner is to first prepare an outline of your clinic. Remember, your clinic presentation is really like an article or a report, but you are presenting it orally. Just like if you were writing a report on the subject, you would first prepare an outline or a "Table of Contents" for your report. However, in this case it is a "Table of Contents" for your clinic. A typical table of contents should start out by stating the clinic's objectives, then list the individual elements that you plan to talk about that contribute to achieving the objectives.

Review the Clinic: Another thing I always do when I prepare a clinic, is that I give a copy to some model railroading friends, and ask them to critique it. Having independent sets of eyes look at your clinic will often identify everything from spelling or punctuation errors to perhaps logic problems, where some information on a slide may not make any sense to them!

Delivery

In many respects, I believe delivery is probably the most important aspect of a good clinic. While you can have great material to support your clinic's objectives, if it is not presented in an understandable manner that holds the audience's attention, your clinic will not be a success.

• Presentation slides: use bullets. Each bullet should be short and succinct. Don't write bullets that are too long. Bullets don't have to be sentences.

• Use illustrations: the audience needs to visualize what you are talking about. Some people learn visually. Use photos and drawings in your presentation to illustrate what you are talking about.

• Speak clearly to the audience and use intonation. Audiences pay attention to a speaker that speaks clearly. and directly to them. Don't speak softly or slur your words. Don't speak in a monotone. Put emphasis on key words.

• Don't read your slides. The audience can read. They don't need someone to read the slides for them. You should talk about the information on the slides, injecting additional thoughts; speak in a casual manner.

• Face the audience, not the screen. Don't turn your back to the audience.
- Speak so that folks in the back of the room can hear you.
- Make eye contact with your audience, and they will perceive that you are talking to them.
- When you put up a slide, quickly look at it to make sure you understand what the content of that slide is, then face the audience while you talk.
- If you have a laptop in front of you with the slide on the screen, just glance down at the screen to see what is on the slide, but then look up again and talk to the audience.

Time your presentation: Most conventions allot one hour for a clinic. If the time allotted is an hour, time your clinic to last no more than 50-55 minutes. This will allow 5-10 minutes at the end for questions.

• Don't make your clinic too short. I have attended some clinics where the clinician completes the clinic in 25 minutes or so, and the audience is sitting there wondering "Where's the rest of the clinic?"

• Don't make it too long. Remember, at the end of the hour, many folks in the audience may have to leave to attend a tour, visit layouts, etc. It gets disruptive if you are still talking while half the audience gets up and leaves!

The next clinician probably wants to get in the room and get their presentation loaded on the computer, make sure it works OK, or perhaps also set up some materials that support their clinic. Folks that plan to attend the next clinic will start filing in the room as well.

Rehearse: It is imperative that you practice presenting your clinic beforehand and time how long it takes to present it. If it runs too long, figure out what you need to cut out to shorten it. If it is too short, look for some places you can add more material or talk in more depth about an aspect of the clinic topic.

Plan the end of the clinic: At the end of the clinic, it may be worthwhile to recap what you told the audience, and remind them again of the objectives. On you final slides, it is often helpful to list

additional reference material or websites that the audience can go to find more information on your clinic's subject. In this day and age, few clinicians provide hardcopies of their presentations, so if your clinic slides will be placed on a website, provide the website address on the last slide.

At the very end, thank your audience for their attention. If there is some time left, ask the audience if they have any questions. If the hour is up, and there are still members of the audience with questions, tell them you will be happy to talk with them out in the hallway.

Operations Initiative

by Bill Mosteller

The operations program, similar to the 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've operated before or are perhaps even a grizzled veteran, these are all enjoyable layouts to operate on. If you'd like to participate, or have questions, E-mail Bill Mosteller wsm@greatdecals.com.

Andrew Dodge's Colorado Midland Railway, November 18, 2017

by Bill Mosteller

I've mentioned before (click here for details) that I keep discovering variations in operating model railroad schemes that surprise me. Andrew Dodge, MMR, is an accomplished and published (*Model Stock Pens Along a Fascia,* Model Railroader, May 2017) modeler. A key to understanding his Colorado Midland Railway is that the locomotives are the focus. This makes perfect sense, as Andrew built all the steam engines in his basement shop. He's a bit of a throwback to days of yore in model railroading, a real craftsman. He built the railroad to Proto48 standards, and thus has proven you can run trains to such standards. The railroad scenery is beautiful. (*Use Natural Soil and Rocks in Scenery*, Model Railroader, September 2017)

Left-to-right: Jerome Skeim, Mark Czerwinski, Wayland Moore, Alex Polimeni, Pete Clarke, Jane Clarke, Ray Price, Ron Polimeni, and Andrew Dodge.

The operating instructions include mandatory stops not merely for water, but also for coal, sand, and cool-down after a hard run. (I only remember hearing about such for New Haven EP-5 "Jet" electric locomotives.) The couplers are prototype scaled and operate with realistic latch pins. So yes, you must open both knuckles before coupling. Trains are short (mine topped out at four cars), so there is switching, but the locomotives are the focus.

Operating session on Brian Sheron's Long Island RR layout, December 16, 2017

by Bill Roman

Although I had been to see Brian's layout two or three times, I hadn't had the opportunity until December 16th to operate on it along with two other folks. Brian walked us around the old and new portions of the layout (primarily a part of New York City complete with elevated trackage, and Long Island City with a car float operation plus several industries). He provided a clear explanation of how the switching work was to be accomplished, and then the two of us who were to run local freights headed out of the main yard to our respective work areas. Switch lists identified the cars (by reporting marks, type of car, and color) to be set out and picked up at a variety of locations, and off to work we went. I completed my first assignment in about 30 minutes, and got clearance back into the yard. By that time our third operator who was working as Yardmaster had made up another train in the yard ready to depart in the opposite direction from my first one. This assignment also took about a half hour to complete and return to the yard. We had a brief critique of the session, and wrapped up.

Bill Roman, Bill Mosteller, Dave Collison, and Brian Sheron (left-to-right)

The layout incorporates numerous switching opportunities at a wide variety of industries with most switches operated by ground throws but with some powered switched in less-accessible locations. Brian has likely the most people and vehicles that I've ever seen on a layout, plus excellent use of lighting in and around many of the industries. While I've never seen any part of Long Island except in photos, he certainly has built a layout which captures the look and feel of a heavily urbanized landscape. I really appreciate the opportunity to operate on this layout!

Return to Bill of Lading

We Want Your Photos!

Model railroading in a very visual hobby and also a very personalized hobby. It is personalized in that we all model what we want to model, and what we want to model is almost always different from what others want to model. However, we learn a lot from what others do, and it is visual because we enjoy seeing not only the fruits of our own labors, but also the handiwork and modeling skills of our fellow model railroaders. And what better way to share our modeling skills with others than to look at photos of our fellow model railroaders' layouts. We can watch the progress of some layouts as they are being constructed, or we can see changes that were made to some layouts, or just look at pictures of folks operating trains on a layout and having fun.

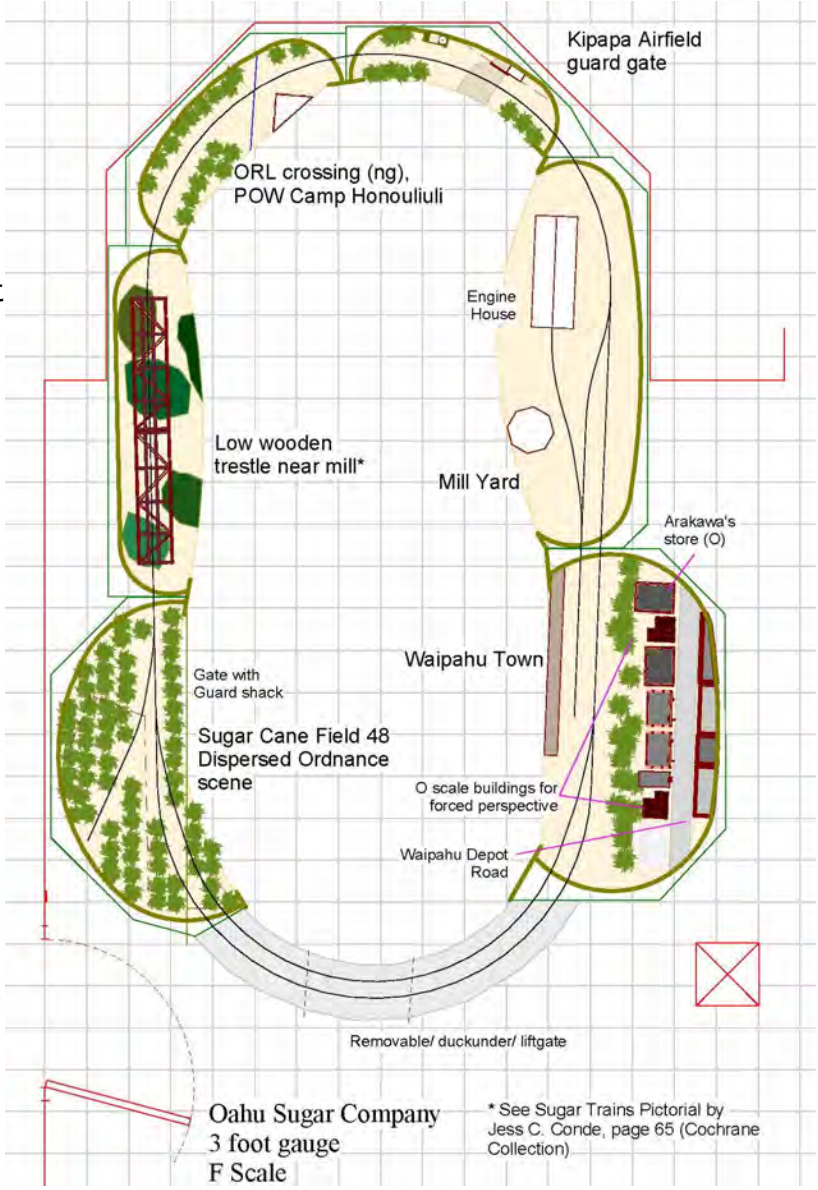
We want to create a new section in each issue of *The Potomac Flyer* with pictures of members' layouts. The photos can show progress on the construction of a layout, just photos of your layout, or perhaps a photo of an operating session. It's up to you. Just send your photos to Potomac-Flyer@potomac-nmra.org, and provide a caption that briefly explains what is in the photo.

Layout Open House Report
Nick Kalis's Oahu Sugar Company

by Bob Rosenberg Photos by Elizabeth Boisvert

Oahu During WWII

My only personal involvement with sugar cane hauling narrow gauged railroads occurred in 1968 when the Navy ship I was assigned to stopped in San Juan, Puerto Rico for a day or two. Most of the crew took advantage of the opportunity to visit the casinos; I decided to arrange a ride out to where I had been told the trains were — and sure enough, they were there, although it was evening and nothing was moving. From a distance, the little steam locomotives reminded me of the Maine two-footers, but in poorer condition; and the cars they were pulling around looked like refugees from a scrap line, mostly open sides with ends and a roof. I shot some slides until the light faded; they're around the house somewhere but I lost track of them years ago. So when Nick Kalis offered to put his railroad on our home tour schedule, I took advantage of the opportunity to see them, or at least models of them, once more.



Nick's Oahu Sugar Company railroad is set in 1944 on the Hawaiian island of the same name (the island is better known for another of its enterprises, the Naval Base at Pearl Harbor). He models in Fn3 scale, the only person I know who does so, using #1 gauge (45mm) track. Others also use this track, and trains are available in different sizes to match the scale in which the modeler is building. The layout, using a track plan designed by Byron Henderson, fills a third of a large basement room and consists of six viewing boxes varying is size from four feet to nine feet long around an oval facing inward on three sides, with a combination duckunder/swing open double track section at one end for access and continuous running.

Each box represents a single complete scene; some are finished, but others have details remaining to be done. I had never seen this arrangement before, but it has some unique advantages: you can detail a scene without having to be concerned with the scene on either side of it and, like any well done model railroad, it's the little things (animals, people, vehicles, etc.) that make the difference.

Starting on the far side, the first box ❶ presented a typical flat sugar plantation landscape with some sugar cane stalks in the foreground about 20 feet high (yes, they grow that tall) . Nick uses broom straw to represent them and it works quite well. That's where the double track end section becomes single track and the turnout there, like all the turnouts on the layout, is hand thrown. The next box ❷has a seven foot long wooden trestle running the length of it. Next ❸ was more sugar cane, some palm trees, and a small replica of the entrance to Kipapa Air Field with an Army Air Force sign, which also dates it to the mid-1940s. Continuing around the oval, the fourth box has more vegetation but with low mountains in the background. Around the corner is the box ❺ with the engine facility at Waipahu, featuring a large water tank and an engine house awaiting finishing on the inside; the last box ❻is also Waipahu with a row of stores in the background and several vintage 1930's and 1940's vehicles parked in front of them (a 1944 version of a shopping mall?); it then becomes double track again as it heads back to the end section. Nick scratchbuilt most of his structures. Motive power is a battery run, Airwire wireless controlled, modified Bachman Porter locomotive with a scratchbuilt tender; the

sugar cane cars are from Shapeways. Nick's wife, Kate, did the background art work and provided the snacks. The whole layout uses "Bendi-Board" for fascia, a Masonite type material that's smooth on one side for painting but has quarter inch vertical slots on the other so it can be easily curved around corners. It originally had to be imported from England, but there's a company in Minnesota that sells it now, too.

With so many of us modeling the transition era in either HO or O gauge (myself included), it was interesting to see what an outstanding job Nick Kalis was able to do in a completely different scale with a virtually unknown railroad in an unusual location and time frame as well. It shows that a model railroad doesn't have to be large to be interesting. It also shows what can be accomplished when you call upon some of the modeling talent available in the Potomac Division for assistance.

Working alone would never have produced such a well done railroad — and no one understands that mistake better than I do. We only had 25 in attendance, a relatively small crowd for what turned out to be a beautiful day. The next time Nick's railroad comes up for a tour, I would suggest that we try a little harder to get there.

Nick provided the following handout about the prototype:

Oahu Sugar Company—1944

Potomac Division Open House / Saturday, November 4, 2017

Nicholas Kalis

Rationale

I have modeled Hawaii's three-foot (36 inch) narrow gauge Oahu Sugar Company as it appeared and operated in 1944 under wartime conditions. Perhaps I chose the WWII era because the most -published photographs were taken by servicemen/railfans stationed in Hawaii during this period. I am modeling Waipahu, Oahu and surrounding areas in summer with clear skies. This layout demonstrates how techniques of European exhibition layouts can be applied to an American semi-permanent layout. Valuable assistance was rendered by Paul Dolkos. Inspiration was also garnered from Ty Treutelaar, Iain Rice, Chris Nevard, and Doug Gurin. Two themes will be evident – sugar cane operations and WWII as it affected the home front.

Subject and Scale

Benjamin F. Dillingham founded the Oahu Sugar Company (OSC) on 20 acres of land leased from James Campbell in the vicinity of Waipahu. In 1897 its first locomotive arrived, and in 1899 the first sugar cane was harvested. Additional locomotives then followed. The plantation grew to over 12,000 acres of leased land. By 1939, the railroad reached sixty miles of three-foot gauge track plus an unspecified amount of portable track on which 939 plantation cars (860 four-ton cane cars, fifty flat cars, and 29 other cars) operated. During WWII, over 2,800 acres were commandeered from the OSC for a POW camp for German prisoners.

I decided to model the OSC railroad as it appeared in 1944, as available photos of ammunition trains show the OSC towing bombs to be dispersed in sugar cane fields. After the surprise attack on Pearl Harbor, the U.S. Navy decided it prudent to separate bombs from planes and ships in the event of another attack. Also, the U.S. Army Air Force Kipapa Airport was operational in 1944 and is depicted on my backdrop with a gate modeled in three dimensions. By late 1950 the railway system was eliminated from the plantation.

I decided to model Waipahu's water tank with a flat roof given the lack of snow in Oahu and some available photos. The number of figures has been minimized since their stationary poses require too much suspension of disbelief (a lesson learned from Paul Dolkos). Based on available photos, many O scale vehicles are parked in Waipahu to demonstrate what a busy mercantile center it was. O scale photos were utilized to make a convincing scene quickly with false fronts.

Modeling in Fn3, I have modified a Bachmann Porter engine to run on batteries as Waikane Number 9, and I have scratchbuilt a tender for it as well. A second locomotive is by Piko.

For those curious, the sugar cane crane was a 1:50 scale Northwest Dragline Model 25-D by Spec Cast which I painted to reflect long service in the Hawaiian sunshine. I modified it by removing the bucket and replacing it with O Scale Detail logging claw, finished model by Model Tech Studios.

Future modeling projects include irrigation ditches.

Content and Scope

My layout consists of various Layout Design Elements (LDEs) including the town of Waipahu in O scale (forced perspective) and Waipahu engine terminal. Another LDE is a trestle (appearing in a photograph of 1946) which I have scratchbuilt.

Modeling Standards

I have scratchbuilt most of the major structures on my layout. Shapeways-produced sugar cane cars are based on drawings by the late Jim Dunlop as they appeared in Bob Brown's *Narrow Gauge and Shortline Gazette*. Visitors may note W. Britain's 1/30 scale Air Base Sentry Box & Gate with 15 MPH Sign, WWII (No. 51019) stands in for a US Army sentry box for which photographic evidence exists. I use Llagas Creek Railways code 215 track (scales to 65 pounds/yard) with no ballast (as verified by photographs of the prototype).

Operational Design

My layout is a continuous oval with some possibilities for realistic operation built in.

Photo: Kate Kalis

Construction

My layout was largely built in my garage and then assembled and completed in my finished basement. It consists of fascia, valance, and wings. Lighting is concealed behind valances. Backdrops are curved styrene, concealed by wings. Minimal scenery with a low horizon was chosen. Most backdrops have two artfully disguised penetrations allowing train to move from one scene to another. I was assisted by Gary Eames, Jim Stapleton, Dick Kilday, and many others who know who they are.

Presentation and Visual Design
Layout skirts are made of white paneling. Valances and fascia match the room walls. My wife Kate painted the backdrops using acrylic paints on styrene (note XT-10 Kipapa military materiel storage tunnel). Kate plans to paint a POW camp on one of our backdrops.

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Jesse C. Conde, **Sugar Trains Pictorial,** Glenwood Publishers, 1975.

John Wesley Coulter, *Waipahu: The Oahu Sugar Cane Plantation*, **Economic Geography**, Vol. 9, No. 1 (Jan., 1933), pp. 60-71

Gale E Treiber, **Hawaiian Railway Album WWII Photographs Volume 3 — Plantation Railways on Oahu,** The Railroad Press, 2007

Hans L'Orange et. al., **Affidavit**, March 31 1942

Return to Bill of Lading

Waldorf, MD, Doubleheader
Dale Latham's Piedmont Southern

Where:
Note: Railroad is located in a garage which can only be accessed by two half-flights of stairs.

The layout is an HO scale model railroad filling an approximately 528 square foot room. I model 1956 and utilize first generation diesel and some steam. The layout is almost 100% scenicked. Most of the structures are either scratchbuilt or kitbashed. Control is with a Digitrax radio DCC system. The layout has been seen in Kalmbach's *Great Model Railroads*, their *Art of Model Railroading* calendar, *Model Railroad Planning*, and *Model Railroader* magazine. The railroad is operated as part of the Chesapeake Trainmaster's Club round-robin operating group. The CTC meets every Tuesday evening.

The railroad name was developed in the late 70's as a freelanced railroad connecting Richmond, VA with Connellsville, PA. It has gone through many changes and upgrades over the years and continues to do so, but has always retained the same name.

Click here for details of Dale's last open house with us.

Glenn Paulson's Conrail Allegheny Division

Where:
Note: Railroad is located in a basement WITH a walk-out door for accessibility, but there is a bit of a hill from the sidewalk to the basement doors.

The Conrail Allegheny Division is a point-to-point, double-deck HO Scale layout built for operation. Eastbound trains depart from Conway Yard staging and the Pitcairn Intermodal facility. Westbound trains depart from Enola Yard staging or from Harris Yard. The decks are 18" apart and helpers are sometimes needed to get trains through the mountains.

Almost fifty industries are serviced by Conrail. The Karra Steel branch line breaks off from the double-track main and is home to numerous steel mill-related industries and rolling mills. Conrail interchanges with the Karra Steel railroad (a spinoff of Davies Steel) and the E, J&E at the south end of the branch line.

Glenn is a member of an operating group, the Chesapeake TrainMasters, and thanks the members for their inspiration, operating ideas, and work sessions.

This is our first visit to Glenn's railroad.

Return to Bill of Lading

Layout Open House — Chris Smith's Norfolk and Western Fuel Satisfaction

Where:
When:
Note: The layout is not accessible for the disabled.

This O scale layout is inspired by two track east/west mainline traffic through the coal fields of West Virginia in 1953. Steam-era coal and freight trains are the emphasis, with run-bys of the Powhatan Arrow, Pocahontas, and other passenger trains. Doubleheaded engines are common. A mine branch is the focus for some light switching.

The railroad is operated using DCC. The footprint of the railroad is 24'x26' with a 200' mainline run. Scenery is about 50 percent complete.

Since the previous open house in 2014 (click here), some scenery has been added. About 90 percent of the track is now ballasted, coal loads have been added to 60 hoppers, and some additional painting and weathering has been done.

The layout currently is located in Silver Spring, MD, but will be dismantled and moved to Florida at the end of 2018.

Return to Bill of Lading

Layout Tours Following Business Meeting March 24th

The following layouts will be open for visitors at 1:00 pm following the business meeting. A map showing relative location and addresses will be available at the meeting.

John Paganoni's Central Vermont (CV) Railway

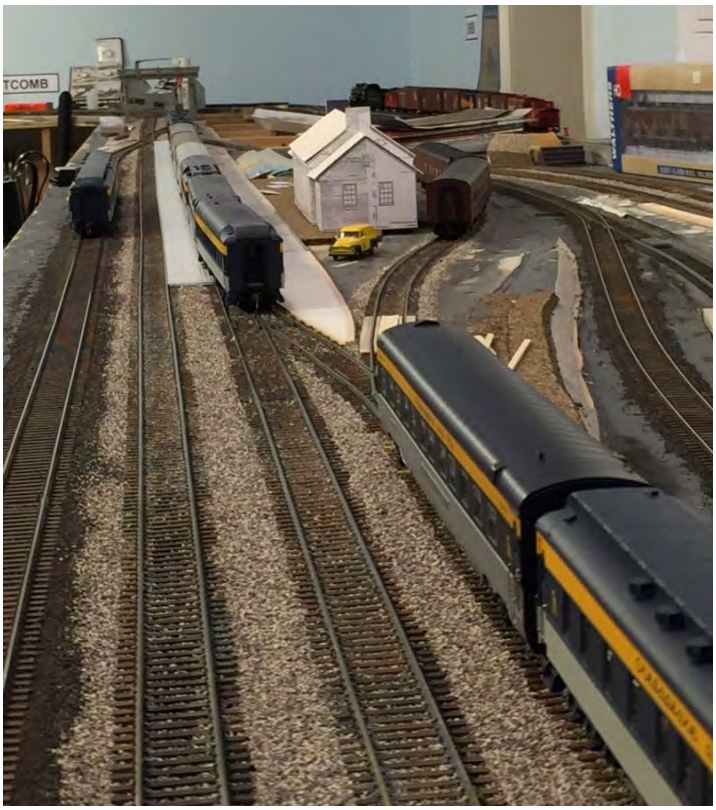
John models the Central Vermont (CV) Railway circa late 1940's—early 1950's when steam was the prime source of motive power. This is a small HO layout (approximately 12'6" x 14') in a spare bedroom that is "in progress" and about 20% complete. Scenes are very compressed, but the objective is to capture the essence of the CV New London terminal, the Montville station and depot, the Robert Gair paper mill on the Thames River, and the Palmertown Branch. The Palmertown Branch will eventually have the Doyle Sand & Gravel Company, Shelton Loom Company, Warehouse Point, and the Robertson Paper Box Company. Homes and businesses will also be of the same era and the terrain will be replicated within reason considering the small size of the layout. The rest of the layout — beyond the Palmertown Branch and across the Montville Trestle — will be freelanced. This is a "point-to-point" layout with a loop at one end and the New London turntable at the other; therefore, no continuous running is possible. The Central Vermont portion is DCC using NCE and the "freelance" portion is planned to be DC.

ACCESSIBILITY: This layout is on the second floor of the house; however, there is a stair chair from the basement (ground level) to the first floor and another stair chair up to the layout room on the second floor. There is an accessible restroom on the first floor with a handrail for support. On the layout room floor (2nd floor) the restroom has an accessible height toilet, but no handrails. A walker is available for the train room.

Return to Bill of Lading

Bryan Kidd's Chesapeake and Ohio Railway's Alleghany Sub-Division

Bryan Kidd models the Chesapeake and Ohio Railway's Alleghany Sub-Division (Clifton Forge, VA to Hinton, WV). Set in 1952, the scenes he's included are those that are operationally interesting to him: the changing of engines at Hinton; the helper service that ran from Hinton to Alleghany, VA (utilizing C&O's massive H-8 Mallets); the unique "middle of nowhere" passenger yard that served C&O's regular and special passenger trains (and regular freight service) destined for the Greenbrier Hotel at White Sulphur Springs, WV; and the Greenbrier Sub-Division (that served Cass and Durbin, WV) junction at Ronceverte, WV.



The double track mainline is mostly Shinohara track and turnouts. The run is about 145' with a minimum radius of around 32". Turnouts are powered with Tortoise motors and controlled, for now, by Digitrax throttles (via Loco Net) on the mainline, and rotary switches in the local yards. The plan is to have the railroad centrally dispatched using CTC (i.e., computer and JMRI). Future-world plans also include a staging yard to represent Clifton Forge and points east; a representation of the Westvaco Paper Mill at Covington, VA, and the mixed-train service to the Homestead Hotel at Hot Springs, VA.

Return to Bill of Lading

Mat Thompson's Oregon Coast Railroad

The HO scale Oregon Coast Railroad, set in 1957, follows the Columbia River from Portland to Astoria and then south along the Pacific Ocean to Tillamook. Modeled activities include an ocean port with a tramp steamer and car float, a large yard and engine facility, a large meatpacking plant, and a large lumber mill. The layout fills a 36' by 32' room in a folded dogbone configuration plus a 50' x 2' figure "C" extension in a second room. Scenery is 99% complete with several water features and hundreds of trees. The control system is Radio Digitrax. Operations are conducted using Time Table & Train Order procedures. Engines are diesels and all are sound equipped. The layout was featured in *Great Model Railroads 2014*.

Return to Bill of Lading

Ernie Little's Norfolk Southern Connector

Ernie Little's Norfolk Southern Connector (NSC) is a freelanced HO Scale model railroad set to model parts of the Roanoke and Shenandoah Valleys of Virginia. The NSC links the towns of Joyceville, Barstow, and Littleton, Virginia, and Nickel City, Pennsylvania, where the NSC has an interchange with the Nickel City Line. Each town has one or more industries or serves as an interchange point between the other railroads with which the NSC has operating agreements.

The layout is a 20-foot by 16-foot single deck design that will expand to a second deck in the future. It provides staging and single track mainline operation with DCC control. It is located in the lower level of the home and has immediate access to a full bathroom, model railroad work area, and to the exterior. There is one staging yard that enters the layout near the NSC shops in Littleton and allows locomotives to change direction of travel.

Return to Bill of Lading