

DC/DCC Track Voltage Tester

By Frank Martin

To accommodate the range of interest among our club members, our modular layout is often wired for both DC and DCC power. When setting up the layout or when troubleshooting problems during an operating session, quick and easy track voltage testing anywhere on the layout is essential. The track voltage tester described here does the job well. It distinguishes between DC and DCC power and indicates the polarity of DC powered tracks. Unlike the "coin across the rails," the tester does not short out power packs or boosters or disturb decoder programming. It requires no batteries, power supply, or test leads and can be carried in a wallet or on a key ring. Even with all these features, it is simple, inexpensive, rugged, and easy to build and use.

The tester makes a great first project for someone who has never built anything electrical or elec-

tronic. The only materials needed to build it are a piece of double-sided printed circuit board, a couple of LEDs, a dropping resistor, and some scrap bits of sheet nickel-silver, copper, or bronze. You will also need some basic tools to cut and shape the circuit board and a small soldering iron or gun to mount to parts on the board.

No dimension is critical as long as the tester is easy to hold and view and can span the gauge of the track you want to test. The photographs (Figure 1) show both sides of a track voltage tester I built for HO scale but it will work for N and Z scale. If you make it a bit wider it can be used for S and O



Figure 1 The finished DC/DCC Track Voltage Tester
Side A Side B

scale layouts as well. A variation shown in Figure 3 would be usable for G scale layouts without changing the overall dimensions.

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MER LOCAL

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The MER LOCAL welcomes articles, photographs and model railroad related material as contributions to members' mutual enjoyment of the hobby. Materials should have a wide appeal. Editors will exercise all due care of submissions, but contributors should not send originals without having back-up copies of both articles and photographs. Editors, by definition, reserve the right—and have the responsibility—to make corrections, deletions and changes to accommodate space.

Keeping In Touch...

by Rita Lynam
MER Business Manager

The summer has flown by so quickly. First, it was so wet I thought we would float away. Then summer was here with 90-degree weather and humidity. WOW!! What a year for extremes in weather. Hope you all survived!

Our convention in Reston is soon approaching. Be sure to come into the contest room and say hello. That is one of my favorite things – linking a face with a name on our roster. If you want to give me an address change or re-up for next year, I will be available.

Now that activities will be increasing on the division level, be sure to give me two weeks notice, and I will mail you some of our newsletters for any table or booth you have to promote our hobby. Just let me know at one of my addresses – bottom of page on right side.

Hope to see you in Reston!

Recently Deceased Member

Capt. Stephen S. Kingsley, Virginia Beach, Virginia. Born December 1932. Joined the NMRA in 1982 #062228. Joined the MER in 1983 #5139.

We send our sympathy to the family members of our recently deceased members.

Send change of address to
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mgrmerbus@aol.com
or at the address on the bottom right corner of this page.

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President's Column

Norm Garner

The Board of Trustees of the National Model Railroad Association met at the National Convention in Toronto, Canada and approved the Monmouth County move to the Mid-Eastern Region from the Northeastern Region. This became effective July 12, 2003. The NER Trustee, Stan Ames, has informed me it may take some time for the home office to reflect this change in its database. The NER and MER membership chairs are encouraged to work with HQ to ensure that the required changes take place. I want to thank the Superintendent of the New Jersey Division, Mike McNamara, and his entire staff for persevering in this project. Welcome aboard to all the new members from Monmouth County to the MER. If you have any questions about the MER, please contact the New Jersey Division or any member of the MER Board.

Lone Wolves and Conventions

Alan Mende

Over the past several issues of *The Local*, we've had announcements for the upcoming MER convention – Potomac Junction 2003 – in Reston, VA. If you have never attended a model railroad convention, as "they" say, you don't know what you're missing. I joined the NMRA in 1993 with the express purpose of going to the national convention in Valley Forge, PA. Yeah, I could have registered for the convention without being an NMRA member, but since I had been thinking about joining the organization for a couple of decades, I figured going to the convention was as good a reason as any to join.

Now, I've always been a lone wolf modeler. I've never been a member of a model railroad club, and I have always built my layouts by myself. (I've also never been much of a team player, but that's a different kettle of fish.) If layout building was a group project, how could I call it my layout? Perhaps that attitude played a large part in delaying my joining the NMRA for so long.

So what does being a lone wolf have to do with the fast approaching MER convention? As a lone wolf, I always thought I could learn everything I needed to enjoy model railroading from the magazines I read.

The Long Range Plan (LRP) was voted on at the National Convention. Eric Dervinis, MER trustee, briefed me on the new membership fee proposal. This has not been published in its final form. I still have more questions than answers. I will endeavor to gather as much information as possible before the proposal is put before the NMRA membership for a vote. I am concerned that the NMRA is not taking into consideration the impact this will have on the already declining membership in the organization. It is also my understanding that Regions and Divisions may be impacted financially. I will try to contact the Division Superintendents as more information becomes available. Keep in mind, this is YOUR organization and your vote will count towards the survival of the MER. If you have any questions, please feel free to contact me either by e-mail or by phone. I will do my best to try and get the answer for you. My contact information is located in the front of *The Local*.

Remember that the MER convention is in October and is the only convention we are having this year. Let's make it a big one.

But on the day I walked into the convention center in Valley Forge and took a quick look at the subjects the clinics were going to cover, I knew I had been missing an entirely new opportunity to learn about my hobby. With so many clinics being offered, I was like the proverbial kid in the candy shop who didn't know what to choose. Not only did I come away from the convention with a boxcar-load of new ideas, techniques, and knowledge, I also made the acquaintance of many superb model railroaders – some nationally known by the articles they write. Having the opportunity to sit and BS with them and ask, "How do you _____; I've always had trouble whenever I tried it." I've been hooked on conventions ever since. I haven't been able to attend other national conventions since 1993 – my work generally precludes it – but I've attended more than 50% of the MER regional conventions since then. The "price of admission" has always been more than offset by what I've been able to bring back from them.

I'm still a lone wolf. There's nothing wrong with being one just like there's nothing wrong with being a member of a club or a round-robin layout building and operating group. But regardless of what category of model railroader you might fall in, if you haven't attended a model railroad convention, you don't know what you're missing. There's still time to register for Potomac Junction 2003.

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Track Voltage Tester

Figure 2 shows the overall layout and component details that you can use to build your own track voltage tester for HO and smaller scales. Start by cutting a piece of double sided printed circuit board (e.g., Radio Shack 276-1499) to approximately 1-1/8" x 3". Then cut two holes approximately 1/2" x 3/8" near one end of the board to clear the LEDs (e.g., Radio Shack 276-330). Drill a 3/8" hole at the same end of the board for attaching the tester to a key ring or lanyard. (Thanks to fellow modeler, Tom Cancelmo, for suggesting the key ring hole.)

At the other end of the board, cut insulating gaps in the copper cladding on both sides according to the patterns shown in the pictures. Note that the patterns of gaps on the two sides are different, so be careful. Make rail contacts by cutting from thin sheet stock two squares approximately one-half inch square. (I used bronze weather stripping). Fold them in half so they fit snugly around the bottom edge of the printed circuit board with one on either side of the center gap. Sweat-solder them in place on both sides of the board.

With side A of the circuit board facing you, install the left LED so its leads straddle the circuit board with the cathode on side A and the anode on side B. The cathode of an LED is indicated by a short lead – if the leads have not been cut – and by a flat portion on the rim around the base of the LED. Install the right LED with its leads in the

opposite direction. Spot solder the leads of the LEDs to the circuit board a short distance from the LEDs themselves. Spot solder a 470-ohm resistor (e.g., Radio Shack 271-1317) across the gap on side A between the right rail contact section and the LED section. Finally, trim the excess leads, round the corners, and smooth any sharp edges with a file and sand paper.

To use the tester, position it across the track with one contact on each rail. If neither of the lamps light, then the track is not powered or it is powered at too low a voltage to light the lamps (less than 4 volts with the 470-ohm resistor). If only one lamp lights and the other is dark, the track voltage is DC, and the positive rail is under the lit LED. If both lamps light steady and with equal brightness, the track voltage is AC and is normal for DCC powered tracks provided no one is using DCC address 00. Any indication other than what is expected indicates a problem that needs correcting.

I am sure you will find your DC/DCC track voltage tester an important and useful tool in keeping your trains running. You may even want to build several to put in your different toolboxes or to distribute them to the people who help you maintain and operate your layout.

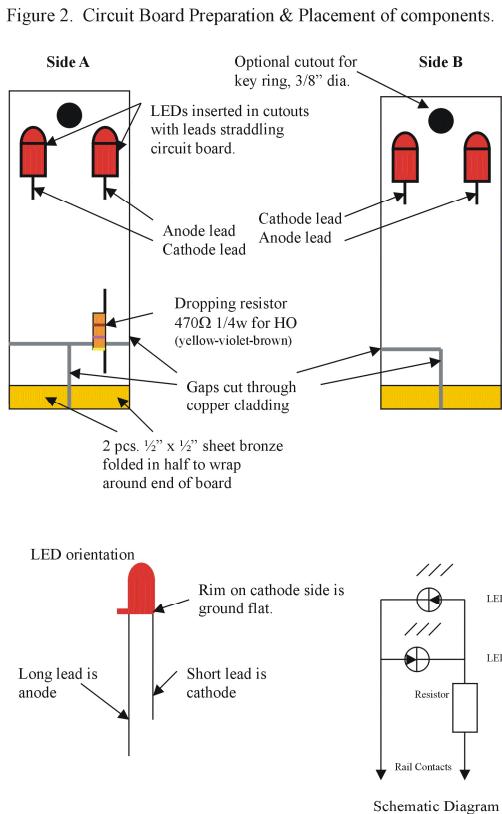


Figure 2 Circuit Board Preparation & Placement of components

Figure 3. Suggested G gauge variation.

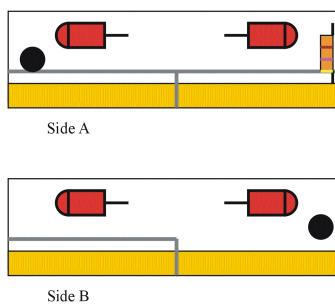


Figure 3 Suggested G-scale variation

Achievement Program

Part 5

By Charlie Flichman

Well, another article on the AP. I hope that these articles and other articles that have been in **The Local** of late are providing a stimulus to get you on your way in starting or continuing your AP journey.

Lets continue this month with a review of the requirements to qualify for the certificate in the Master Builder - Scenery category. A full explanation of this certificate can be found at the NMRA website

<http://www.nmra.org/achievement/apc4.html>.

A. You must construct a completed section of model railroad which is at least: 60 square feet in O scale, 45 square feet in S scale, 32 square feet in HO scale, 18 square feet in N scale or square footage in other scales proportional to HO. This completed section must contain the necessary elements of: Terrain, Structures, Background, Lighting, and Realism/Conformity.

B. You must prepare a set of color photographs or VHS videotape and a written description that clearly describes the intended setting of the model railroad.

C. This description must include the methods and materials used to create the various features of terrain, structures, background and lighting.

D. Submit a Statement of Qualifications (SOQ).

The overall purpose of this certificate is to achieve a realistic effect in the particular scene. The scene does not have to be one single section of a layout, but can be several different sections that make up the required square footage. The scenes don't have to be on the same layout. Maybe you did a scene that is a part of the local club's layout, it can figure into your square footage needs. Scenery done on modules fits into this category. You can construct several modules with different scenes of at least 8 square feet each. The scenery work will have to be of Merit Award quality.

Garden railroads may qualify for this certificate also, but the modeler must show that he or she has worked to create a miniature railroad, not just laid some track through the flowerbeds.

Of the five elements listed above, we'll discuss Terrain first. This element is worth 35 points in the judging. This element should include the ground and all of the natural features such as rocks, water, trees, hills, as well as man-made features such as cuts and fills, streets, etc. All of these features have to blend together to make the scene a copy of a possible full-size setting.

The Structures element of this category, worth 20 points, considers the prototypical suitability, placement, and appearance of structures as scenic effects and not their construction. Construction as we already know is covered

under the Master Builder – Structures category. A point to cover here is that the structures should appear to be IN the ground, not sitting on the ground. Make sure that the appearance of your structures is consistent with the scene you are trying to reproduce. That is, all are urban in an urban scene, farm structures for a rural scene, etc. Structures should be weathered enough to remove the plastic shine.

The Background element of this category is worth 25 points and pertains to the treatment of the wall, backdrop and/or the ceiling to realistically depict depth, distance, and sky. You don't have to have a photographic or landscape artist quality background. The background should continue the illusion of reality. Can you photograph this scene without ruining the overall effect of the scene? A concrete wall painted blue behind your scene is still a concrete wall behind your scene.

The Lighting element of this category is worth 20 points. Illumination effects come from three different aspects:

1. Railroad cars, signals, etc.
2. Structures, streets, etc.
3. Overall lighting effects, day and/or night.

A fully day lit scene is acceptable, but more points can be obtained by showing off different lighting effects. There should be signs of lighting – lenses in locos, street and building lights – but these do not have to be operational.

The last element is Realism/Conformity and is worth 25 points. In this element the judges will evaluate how well you did what you were trying to do in the other four elements.

As mentioned, you have to provide color photographs or a videotape of all of the scenes that make up your required Scenery square footage. There should be one overall photo of each scene and photos of all parts that are being judged. The professional quality of the photos is not being judged. With the photos or VHS tape, a description of the methods and materials used to create each scene should be included. These can be simple statements. Last but not least is the Statement of Qualifications (SOQ). For this certificate, the SOQ is the judge's scoring sheet plus the signed form that the workmanship is yours.

This is one certificate where the paperwork is not as extensive as with some of the other certificates. Yet in my opinion, this certificate requires a lot more work because you are building a complete scene, including the structures, railroad, and everything else that goes with it. True, the structures and other equipment don't have to be award-winning models, but it takes time to make all of the structures, the scenery, trees, ground cover, etc., to complete this scene. This is the certificate I have been working on for some time now and have found that it is the most time consuming of all (at least for me). But don't let that deter you from trying your hand at earning the Scenery certificate!

DCC: A State Of Mind

By Kim Parker

Editor's note: Recently I received the March 2003 issue of the Carolina Piedmont Herald Newsletter of the Carolina Piedmont Division. In it was a report about a DCC clinic that Kim Parker gave at the division's February 2003 meeting. I contacted Bill Cox and Andrew Stitt of the division, and they put me in contact with Kim. What follows is based on Kim's clinic handout. I hope you will find it both interesting and entertaining.

What does it take to be "DCC"?

Well, if you have one loco that has a decoder in it, then you are already doing DCC.

What does this cost?

You can buy a Proto 2000 GP-30 that is DCC-ready for about \$55 (it has a 6-pin plug on the top) and a Digitrax DH163L0 for under \$30. Just remove the plug and replace it with the decoder. You now are DCC capable. You can run your engine on any DCC layout, and you can run it on your own analog layout. Or just buy an Atlas Master Series GP-38 for \$130 MSRP if you just want a "run out of the box" DCC engine.

If I want to make my layout DCC, what does it cost?

My recommendation is a Digitrax Super-Radio Empire Builder for \$440, Super Empire Builder (no radio control but infrared control) for \$240, or my least favorite but lowest cost Zephyr for \$160.

What do I have to do to my layout to make it DCC?

Not much – if you already have a working layout, just remove the two wires from the transformer to the track and put the computer (Command Station/Booster) between them. You are ready. What happens on most layouts is that you want to do more than this.

What about my high frequency generator that provides constant lighting for my passenger cars?

Disconnect it from the track. It will interfere with the computer. Surprise! The lights will be constant without it.

What else is practical but not absolutely necessary?

For convenience, most people will want to put in UP-5

Universal Panels for throttle connections. This is almost a necessity if you are going to use UT-1 throttles. If you have a large layout where you are going to run more than eight engines simultaneously, then you will probably need to invest in a booster. Add a booster for every eight engines or so that you want to run simultaneously. (Can I come over to run on your layout?)

I am concerned about the level of expertise that I have to have to "go DCC".

DCC can be challenging if you want it to be. It doesn't have to be. Like a lot of model railroading, DCC is still in its infancy although the last year has seen significant improvements, which allow a lot of equipment to be "ready to run".

I have heard so many bad things about DCC. What can go wrong?

You should not use older (over a year old) decoders with coreless (basket wound) motors. Usually these are found only in LGB G scale.

Do I have to replace/fix all my turnouts?

No. See below. This is a challenge, not to mention an additional expense with not a lot of benefit or need.

Do I have to learn about hexadecimal or computers to use DCC?

No. The "throttles" for DCC have been complicated. Digitrax earlier models, DT100 through DT300 are difficult, at best, to use. Other throttles are gaining popularity because of their more "friendly" interface like the Digitrax model DT400 and UT-1. Wangrow, Lenz, and Atlas are still in the market because of Digitrax deficiencies in this area.

Can I just put a decoder in my old analog engines?

Yes you can, but you probably don't want to. If the motor pulls over an amp at stall, then it will burn up the decoder. The other issue is that most older analog engines used either a common frame ground (Athearn) or a split frame motor (Bachmann, Kato),

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DCC State of Mind

and these require a fair amount of work to isolate the motor from the frame.

Can I put a decoder in my brass engines?

Yes again. There are very few engines that cannot have a decoder in them. But you may not want to because of the motor, load, etc. The stall current could burn out the decoder.

I heard that you have to clean your track more often. Is this true?

No. As a matter of fact, I clean mine less often. It is the wheels on my engines that need the most attention.

Can I run analog on digital and digital on analog?

Basically, yes, but you are limited to one analog engine at a time on digital for the whole layout. You can run a digitized (DCC) engine on an analog layout. It just doesn't start until you get to five volts.

What should I watch out for when starting?

Many of the older (a year ago) decoders required you to change your bulbs from 1.5v to 18v. This is not necessarily the case today but you should check before you burn out your bulbs.

You may have layout wiring that is insufficient. With an analog layout, you would not really know whether it is good or not. You can check this out simply on a digital layout with a quarter. If the command station does not beep, then you need to beef up your wiring in this section of your layout. You could theoretically burn out a motor or decoder if you don't do this, but I wouldn't get all worried about it. It would be a freak accident that would make it happen.

What's next?

- You might consider more than one throttle for guests. The UT-1 is a great, simple throttle. Make sure that you add more UP-5 Universal Panels for throttle connections. The UT-1 doesn't have infrared or radio capability.
- You might consider a dedicated power supply to the command station.
- You might consider wiring an engine that was cheap just to gain confidence that you can do it.

- Add more UP-5s or make your own.
- Add automatic reversing.
- Add sound decoders.
- Add stationary decoders.
- Out of reach of mere mortals
- Turnout control
- Block detection
- Signaling
- Transponding
- CTC (Centralized Train Control) by computer

Things to do when you just want to depress your train buddies.

Redo all of your turnouts so an engine or car with fat wheels doesn't short out your whole layout when it goes through the frog. Tell them that they need to do this, too.

Remove all of your cab control wiring and start from scratch. Show them the pile of useless wire and selector switches.

Put decoders in all of your vintage brass that you haven't run since 1969. Then show them off. This may only work for a few seconds and probably only without any cars attached, so don't run them until you have everyone gathered around.

Change out all of your decoders for the newest models with six functions. Then try to figure out six functions to control. Firebox lights? Remote uncoupling?

Automate your staging yard.

Get the actual response characteristics for each prototype – if possible the exact engine. Calculate and program the appropriate configuration variables for the 28 speed steps to match for every engine on your roster.

Switch to Z scale and THEN try DCC!

POTOMAC JUNCTION 2003

October 10-13, 2003

Reston, Virginia

**Guest of Honor:
John Armstrong**

October 10-13, Columbus Day weekend
(yes, same weekend as Timonium).

Venue: Sheraton Reston, Fairfax County, Virginia. It's just off the Toll Road on the Reston Parkway. \$89/night double occupancy. See the Registration form for details.

The plan: hands-on activities from end to end, including clinics and running trains. Fabulous home layout tours, a proto tour or two, maps to railfanning locations.

Home Layout Open Houses:

Lance Mindheim	N
Paul Dolkos	HO
Pliny Holt	N
Monroe Stewart	N
Don Watson	G
John Armstrong	O
JD Smith	HO
Dick Patton	On3
Marshall Abrams	HO
Dale Latham	HO

You might have read about them in MR... Now's your chance to see them all on the same weekend--hard to beat that! Others are in the works.

SPECIAL EVENT: for early registrants only.

DINNER WITH JOHN ARMSTRONG. Ten of the **early** registrants will be selected at random to have dinner with John Armstrong Saturday night (hotel restaurant, you pay for your meal). Following this dinner, there will be a guest speaker presentation by Mr Armstrong, followed by the Auction.

Prototype tours:

Manassas Rock Quarry: Friday morning, since that's when they're actually driving their trains around doing stuff.

VRE tour: piggy-backs off the Rock Quarry. (still tentative)

Alexandria Power Plant: Saturday.

Railfanning:

Where to go in the area to watch trains, safely and legally. Maps for a number of interesting places around DC where you can see something interesting. (My wife says 9AM in downtown Manassas is guaranteed to stop traffic).

<http://members.cox.net/chyde/PotomacDivision/Potomac-Junction.html>

(updated regularly)

Send registration for the convention to:

Potomac Junction
PO Box 447
Swedesboro, NJ 08085

The telephone number is: 856-467-3385

email is:
potomacjunction2003@yahoo.com

Paypal registration will be available soon (I hope) from the website above. Check there if you'd like to do that.

Convention planning is in high gear. Most of the preliminary work and inquiries are starting to fall into place. Registration will open Thursday night for those attendees who want to take the prototype Quarry/VRE tour early Friday morning. Registration will continue through Sunday morning. Adjacent to the registration activities will be the company store and door prize ticket sale. Saturday will include a second prototype tour to

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Potomac Junction continued

view a power plant operation. Be sure to include your camera when you pack, as both tours will include live rail activities. Your convention packet will list many excellent train-watching locations.

Within the hotel will be both N and HO scale module layouts. Both are planning to offer several hours of operating sessions. There will be the usual Saturday night auction activities with Bob Charles doing the calling. The auction will be after the keynote address presented by John Armstrong. Of course, the contest room will be a focal point for both the AP and popular vote model contests and non-rail entries. The Presidents Award entry is a Maintenance-of-Way car, not what was previously announced. The awards for all the contests and door prizes will be presented immediately after the Sunday Brunch banquet. The annual business meeting follows the awards.

Clinics are always popular at any convention, and we will have some excellent hands-on presentations. You will have the opportunity to construct a styrene building, a brass signal tower, or a wood structure/car. These items will be yours to take home to your own layout. Other clinic presentations are being planned and will be announced in **The Local** or on the convention web site as soon as they are finalized. What about home layout tours you ask? We will have them also. The current schedule has clinics and home layout tours planned for Friday, Saturday, Sunday and a few on Monday for those who are able to take advantage of the Columbus Day holiday and do not have to hurry home.

For those who wish to take in some of the local sights, there is DC with all the historic memorials, museums, and government buildings. METRO sells all day unlimited ride passes for \$5.00. For the history buffs, Manassas (or Bull Run) battlefield is a short drive away. Other Civil War locations such as Gettysburg, Fredericksburg, Ox Hill, Fairfax Station, and Alexandria are all within a few hours drive from the hotel. If shopping is your thing, plan to visit Potomac Mills, Reston Town Center (hotel runs a free shuttle bus), or Leesburg Outlet Mall. I won't even begin to start on all the great restaurants in the local area.

October is a great time of year in the DC area. Plan to come, bring the family, and enjoy yourself. Watch the web site for the latest information on the details of the convention. Hope to see you all there.

Volunteers are needed. We need Convention reps at each home layout tour, folks to spend time at the Company Store, the White Elephant table, Registration, etc. Please contact Bob at kahlualab@aol.com

CHECK THAT WEBSITE FOR NEWEST DETAILS!

Home Layouts Sampler

Marshall Abrams: The Abrams Railroad Empire is a freelance HO layout modeling the anachronistic era. It occupies a 20' x 22' former gameroom. The focus is on operations using Ship It! to generate train orders and Digitrax DCC for control. We try to follow a fast clock. There are about 20 industrial sidings, one large classification yard with four independent ladders, two towns served by local switchers, and one division with its own yard and off-line interchange. The operating mode is walk-around to follow mainline trains. Scenery is sparse, but you will see a suggestion of urban street running.

Dick Patton: Based on a surveyed but unbuilt SP branch from Durango to Creede, Colorado. Scenery is 80% complete, 386 feet of operational mainline.

Lance Mindheim: Represents a 15-mile stretch on the Monon Railroad in the Bloomington area as it appeared in winter 1955. Prior to that the railroad was legally named the Chicago, Indianapolis and Louisville with the popular nickname Monon. The model railroad fills most of a 20x20 basement. The benchwork is L-girder, track is code 55 and code 40. Most turnouts are handmade. The plan is point to point, control is DCC, all diesel. The theme is the limestone industry, the stone used to build the Pentagon, Washington Cathedral. Mainline track is complete, scenery about 33% done. DCC.

Pliny Holt: Oakland MOLE with 4 handbuilt double-slips some #6 turnouts. Has some 60 scratch-built operating signals that act to control 4 cabs operating as progressive block cabs using scratch-built auto rotary switches. All switches are operated by scratch-built motor-driven switch machines. Mainline about 130'. Featured in 1993 Great Model Railroads, and in 1996 Railroad Model Craftsman.

Monroe Stewart: An N-scale masterpiece. Very large, very detailed, lots of interesting scenes—this is one of those must-see layouts. Recently featured in Model Railroad Planning, and in other magazines in the past. Have a look at what MMR is all about—ask about the details.

Dale Latham: The Piedmont Southern is a free-lanced HO scale model railroad. It represents a coal hauling Appalachian mountain railroad. Time period is the mid 50s; steam to diesel transition. The 500+ sq. ft. layout's scenery is about 90% complete. The majority of the structures are scratchbuilt or kitbashed and have won 2 Blue Lantern awards and 3 first place and Best in Show awards at a number of MER conventions. Most of the track is hand-laid Code 83 and 70. Control is with a Digitrax DCC system. The Piedmont Southern is also home to one of the original Polar Bear Cafe restaurants (see Dec. 2001 Model Railroader).

Bring your camera!

Potomac Junction Clinics Sampler

Wood Scratchbuilding. We are going to scratch build an old-time semi-generic all wood truss-rod flat car - board-by-board! All of the wood parts will be supplied cut to length or nearly so and semirudimentary plans. The decking is supplied pre-stained. Also, most if not all, of the Grandt Line detail parts are included along with metal brake gear castings! Bring the tools you think you will need; sanding, cutting (saw or really sharp knife), drills would be a good idea, etc. I'll bring my traveling tool bag/box, glues, drill (pin vise and powered). Oh, I almost forgot - I work in O scale..... And, yes this can be done in a few hours (3hrs). \$5 extra fare. Martin Brechbiel.

Brass Kit Building. Hands-on instructions on building a HO Scale photo-etched cantilevered signal bridge kit. Techniques for easy soldering, folding parts, using CAA and zip kicker will be demonstrated and participants can practice. The clinic will cost \$30 for HO and \$20 for N and will cover cost of the kit, solder and glue. If you have a pencil style soldering iron bring it along. Bernie Kempinski.

Styrene Scratch Building. In this clinic you will learn how to Scratchbuild a styrene plastic building. \$10 extra fare. Garret Nicholson.

Making Loads. This clinic is designed to show how different loads can be adapted to various types of freight cars. Each attendee will have the opportunity to build a load for his/her choice of freight car. Bring your favorite 'open' car and I'll help you fill it with something. Bob Minnis.

Tree Making. Learn 4 different techniques for making model trees. Rodger Sekera, and others.

Weathering Wood. Learn how to weather wood for structures, cars, and trees using paints and stains. Noll Horan.

Build Turnouts at the Workbench. The story of how I learned to build turnouts the Dick McEvoy way. MER member Dick McEvoy has written articles and held clinics on hand building turnouts. I've tried building them a couple other ways, but I found that this one works for me. I'll not only show how to do it, but also share my experiences as I learned how to follow the directions. Jigs, tools, materials, illustrated steps and critical practices. If I can do it, so can you! Dick Kafka.

Ceiling Tile Scenery. Learn how to make sedimentary rock formations for your model railroad using inexpensive ceiling tile. Step-by-step instructions with questions and answers. See this technique used on a HO corner module. Mark Andersen.

Balancing a Model Freight Car Fleet. One of the most important elements of a convincing model railroad is a

realistic assortment of freight cars which support your layout concept, no matter if you model a specific prototype or if you freelance. We'll take a look at how to establish a representative mix of car types and roadnames for your layout. This clinic will focus on the steam-to-diesel transition era, but we'll also explore factors affecting other eras. Ben Hom.

Tuning an N or HO Locomotive for Top Performance. Mitch Brown.

Economical Prototype Freight Cars. The explosion of high-quality ready-to-run freight car models from Kadee, Proto 2000, Red Caboose, and Intermountain makes it easier for anyone to put a contest winner on his/her layout. Unfortunately, almost every modeler has a large number of cars built from older kits which come off looking second best next to these models. We'll go over some easy improvements to make your legacy kits look better as well as identify kits which will allow you to build a more accurate freight car fleet on a budget. Ben Hom.

DCC in Athearn Locos. Learn the basics of installing a Digitrax DCC decorder in an Athearn diesel locomotive. Mark Andersen.

DCC Sound in a Steam Loco. Basics of installing commercially available DCC "Plug and Play" decoders, including installation of Soundtraxx sound/decoders, in Bachman and Life-Like Heritage steam locomotives. Demonstration of setting addresses and changing configuration values (vary starting voltage, sound volume, etc.) using Digitrax DT-400 controller. Jerry McCrory.

DCC in the Yard. Basics of installing and operating a yard using Digitrax stationary decoders. Demonstration of setting turnout addresses and controlling a yard switcher and turnouts using a DT-400 controller. See how to control a double crossover with only one switch machine. Ed Price.

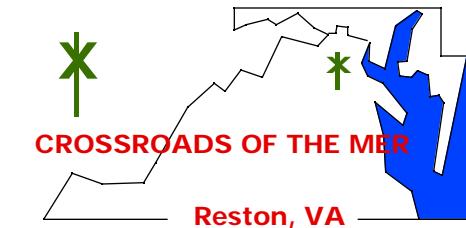
Meet the Trustee. Do you want to know what happened at the board meeting in Toronto? Stop by and find out from a 'director' (Trustee) on the national board, and also a member of this region. After a brief introduction, the rest of the time will be reserved for questions from the audience. The discussion promises to be spirited and the exchange enlightening. BTW, check out the proposed Regulations on the NMRA web site before you come to this clinic. Eric Dervinis.

Achievement Program (AP). Learn all about the AP. This program was developed by the NMRA to help modeler's perfect their skills in number of different areas. You will learn the requirements and how easy it is to receive the Golden Spike Award. You will also learn the various awards you can earn leading to the Master Model Railroader Award. Roger Cason and Charlie Flichman.

Potomac Junction 2003
 Mid Eastern Region, NMRA Fall Convention
 October 10, 11, 12, & 13, 2003
 Reston, Virginia

Names as you wish to have them appear on your badges:

POTOMAC JUNCTION 2003



Address Street: _____

City: _____ State: _____ ZIP: _____

NMRA# _____ MER # _____ NVNTRAK # _____

E-Mail: _____

	Quantity	Total Cost
Full Registration (after Sept 1), NVNTRAK		@\$45
Non-NMRA Member Fee		@\$15
Non-MER Member Fee		@\$8
Spouse		@\$15
Teenagers (12 to 16)		@\$5
Children (under 12)		free
101 Styrene scratchbuilding clinic (limit 15)		@\$10 SOLD OUT
102 Wood scratchbuilding clinic (limit 10)		@\$5
103 Brass kit clinic (N) [bring soldering iron]		@\$20
104 Brass kit clinic (HO) [bring soldering iron]		@\$30
301 Rock Quarry & VRE Proto tour		@\$20
302 Alexandria Power Plant		@\$20
401 Sunday Brunch		@\$20

Send registration for the convention to:

Total FEES Enclosed \$_____

Make Checks payable to: Potomac Junction 03

All Activities are a la carte including the Brunch.

Potomac Junction
 PO Box 447
 Swedesboro, NJ 08085

Payment must accompany registration form. Bounced checks will not be put through twice - you will be required to pay your entire fee by money order or cashier's check through the mail or in cash at the convention. You will be responsible for all bank fees charged. DO NOT enclose hotel room reservation requests with your registration. If you pre-register and later need to cancel, a full refund will be given only if the request is received by the registrar in writing by September 10, 2003. Allow 4 to 6 weeks for processing of your refund. DO NOT mail a registration after September 10, 2003; register at the door.

DO NOT staple your check to your registration form. Call (856)-467-3385 for a recording of current changes and updates. All activities are subject to change, substitution, addition or cancellation.

The Hotel registration form information:

Deadline for room reservations is **September 17**.

Group name is Mid-Eastern Region, NMRA.

Sheraton Reston Hotel

Attn: Reservations

11810 Sunrise Valley Drive

Reston, VA 20191

Telephone reservations are accepted at

703-620-9000 or 800-325-3535.

The sooner you register for a room, the sooner we know whether we are going to have a problem about insufficient room registrations.

Online registration will be available soon, perhaps as you read this.

Do we have a deal for you!

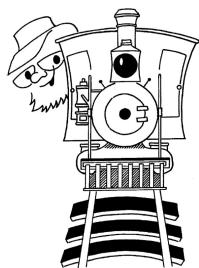
Because you are a member of the
Mid-Eastern Region of the **NMRA**
and

you are attending the MER Fall Convention in Reston,
we are extending a Convention Bonus of an

additional 10% off

our Birthday Sale prices
October 10th thru the 13th

Instead of 10%, **you'll get 20%**; instead of 20%,
you'll get 30% and so on.



Granddad's Hobby Shop
5260-A Port Royal Road
Springfield, Virginia
703-426-0700

You must present your Convention Name Badge to earn this bonus discount.

Our Hours during this sale — Fri through Mon: 10 a.m. until everybody leaves.

Not sure what our Birthday Prices are? In general, the farther back in time we bought it, the greater the discount. We have flyers at the door which explain the details.

MER Conventions over the previous 20 years. How many have you attended?

As most of you know, the 2006 National Convention will be held in Philadelphia. While the Philadelphia Division is the primary sponsor of this event, much assistance will be required from throughout the MER to make it a success. It may seem as though 2006 is a long time in the future, but it isn't too early to consider volunteering either in the pre-convention work or during the actual event. There won't be any MER regional conventions during that year, so hopefully many of our members will attend the National and help out (as well as enjoy the Convention!) More information on specific needs will be forthcoming as we get closer to 2006.

Bill Roman
MER Secretary

Washington, DC (National)

Spring 1983	Wilmington, DE
Fall 1983	Hagerstown, MD
Spring 1984	Greensboro, NC
Fall 1984	Cherry Hill, NJ
Spring 1985	Harrisburg, PA (Joint)
Fall 1985	Williamsburg, VA (Annual meeting only)

Spring 1986	Rockville, MD
Fall 1986	Baltimore, MD
Spring 1987	Valley Forge, PA
Fall 1987	Greensboro, NC
Spring 1988	Bethlehem, PA
Fall 1988	Richmond, VA
Spring 1989	Wilmington, DE
Fall 1989	Cherry Hill, NJ
Fall 1990	Harrisburg, PA
Spring 1991	Lynchburg, VA
Fall 1991	Binghamton, NY (Joint)
Spring 1992	Hampton, VA
Fall 1992	Fairfax, VA
1993	Valley Forge, PA (National)
Fall 1994	Hagerstown, MD
Spring 1995	York, PA
Fall 1995	Hunt Valley, MD
Spring 1996	Pittsburgh, PA (Joint)
Fall 1996	Mt. Laurel, NJ
Spring 1997	Asheville NC (Joint)
Fall 1997	Brandywine, PA
Spring 1998	Charlotte, NC
Fall 1998	Allentown, PA
Spring 1999	Lynchburg, VA
Fall 1999	Hagerstown, MD
Spring 2000	Portsmouth, VA
Fall 2000	Altoona, PA (Joint)
Spring 2001	Frazer, PA
Fall 2001	Lancaster, PA
Spring 2002	Richmond, VA
Fall 2002	Cherry Hill, NJ
	Oct 10-12, 2003 Reston, VA

(Joint conventions are those held with the MER and one or more other Regions)

The Veep's Corner by Clint Hyde, MER VP

Up close and personal:

I'm planning on going to visit Carolina Southern again in September, for the annual picnic at Jack Parker's. Couldn't go to the August Tidewater episode, was in TX on biz/vacation trip. I still intend to visit the chapters I didn't get to yet this year sometime soon. Certainly before the next election!

Recruiting in person: I've had a banner made, it's pretty. If you were at Timonium on June 21, you should have seen it and me at a table. Of course I won't be at the October show, since that's the same weekend as Potomac Junction, but I'll be there again in January. You are welcome to borrow the banner for use at an event in your area, or we can arrange for you to get another one. I'd like to see each of the divisions get one made. Potomac will have one before the Fall convention (late news: PD has had one for years, been about that long since we last saw it). I can supply a good EPS file of the NMRA logo, which came from Terry

Bacus out of an ad by LifeLike.

I hope to have some news regarding Mt. Clare at Potomac Junction.

Other work:

I can now more conveniently email the electronic version of **The Local** to folks who are interested. You will continue to receive a paper copy, but with the email you'll get color photos, and it will arrive a lot sooner. Send me your email address if you are interested, chyd@cox.net. There will still be a 5MB limit on what I can send. At some point in the future, the paper **Local** will be an a la carte choice.

May have a replacement on publisher job for **The Local**...

If I get the details figured out, it will eventually be possible to re-up MER membership online. Of course, this may get OBE'd by the Long-Range Plan and attendant by-laws changes.

Check the convention website for recent schedule info.

Trustee's Report from the Annual BOT Meeting

By Eric Dervinis, NMRA Trustee, MER

First I must report that life is normal in Toronto, this second week of July 2003. People are shopping, eating in restaurants, socializing, going to Blue Jays ball games and enjoying themselves. These are all activities that I participated during my visit to Toronto. From the perspective of a model railroader or railfan, this is a great place to visit. The city has numerous passenger railroads, plenty of freight, a large streetcar system and open access for viewing.

My primary purpose was to attend the annual Board of Trustees (BOT) meeting. The NMRA BOT meets twice a year. The meeting started on Thursday July 10 and ended on Saturday at dinnertime.

The agenda at these meetings includes committee reports, department reports, motions, old business and new business. The NMRA is an Ohio based non-profit corporation, with 501c(3) status. In order to maintain that status, we must meet as a board (the BOT) and conduct an annual membership meeting that will also occur at the Toronto convention.

The treasurer presented two of the most important reports: current financial status and the budget for the next year. Through the first nine months of the current fiscal year, expenses were less than expected, revenue very much in line, and net on the positive side. The expected excess from the Toronto convention would be the only 'surprise' in the next three months. We will not know the results until all of the walk-ins are counted, but the convention committee expects to break even. The budget for the next fiscal year was approved as a break-even document, with possible upside.

The Education department has a new director, Jan Wescott. She is studying our goals, and is undertaking a complete restructure. In her responsibility, Clinics, Modeling with the Masters, Achievement, Contests, and the Junior College are all functional groups. Volunteers with interest in working on any of these national committees are needed. Please contact me if you are interested.

The Convention and Meeting department is headed up by MER's own Henry Jordan. He complimented the Toronto convention committee on an outstanding effort and for making many quick adjustments to the outside factors beyond their control. Henry briefed the board on the next five conventions: Seattle (2004), Cincinnati (2005), Philadelphia (2006), Detroit (2007) and Anaheim (2008). Check our web site and keep these dates clear. We plan to expand the scope of our conventions, inviting more groups to partner with us, and encouraging all model railroaders to attend.

Brent Lambert, replacing Gordon Belt, now manages the Kalmbach Memorial Library. The staff is current with all research requests, and Brent recruited a number of volun-

teers to speed up indexing. A grant request has been written, and we have an excellent chance of receiving money to digitize the index. That would allow us to put the index onto our web site. The NMRA Pacesetters approved grants to the Modeling with the Masters committee and a matching grant to assist in indexing the Library collection.

Saturday was devoted to the Long Range Plan and the new Bylaws (soon to be called Regulations per Ohio law). The board reviewed the document for months prior to the meeting, and a final version was presented to the board. Charlie Getz has to be thanked for many, many hours of service in editing the document, and Mike Brestel for shepherding it through the meeting.

The board discussed the outstanding questions and voted to approve the final changes and corrections. The Regulations have been posted to the NMRA web site, and I can provide a paper copy for someone without computer access. The board recommends that members vote FOR the new regulations.

Why? Yes, they are not perfect and never will be, but after three years of hard work we have a good document to move the organization in the right direction. You can read the Regulations for yourself, but let me give you five reasons why you should vote FOR.

1. Smaller board – At present we have 18 people in a room, meeting twice a year and each wanting to state an opinion. In a three-day board meeting, we do not have time to get our work done. A smaller nine-member board will be nimble, and will delegate more to committees where the real work is accomplished.
2. Reaffirming our core function as standard setters – The LRP restates our purpose as the Standards organization for model railroading. We have to re-establish our duty to protect standards in the future.
3. Single Membership – Join once and you become a member of the organization at all levels. Yes, this will involve changes at all levels, and I appreciate that some will be unhappy with the change, but this is what we should have done in the first place.
4. Library and Museum – While the Museum has paid its own way since inception, the Library is a significant cost to the organization. We are preparing to spin the Library off, let it stand on its own merit and eventually fund its own mandate. The end result is less expense to our members.
5. Relevance – The NMRA is becoming less and less relevant to the modelers of today. We have to bring our corporate structure up to date so we can address today's issues and make the NMRA the future of model railroading.

The Chair of the Long Range Planning Committee, Charlie Getz is authoring a series of articles in the Bulletin explaining the LRP and the Regulations. Please read these and ask questions. I will field queries by phone, email, postal mail and in person. I want to hear from you. In the end, ask yourself are we better continuing to drift, or should we vote to move the NMRA into the 21st century.

Operations with the Potomac Module Crew

The Potomac Module Crew will hold operating sessions on its railroad during the MER Convention in Reston. We would like to invite convention attendees to join us in the operating sessions. We will run a simple operating scheme with three operating roles. We are also relatively new to Operations ourselves, so we are open to suggestions on improving our style as well. The Dispatcher will control the over-the-road operations. The Yardmaster will control the main yard and make up trains. Engineers will operate their trains over the line and perform switching as needed under the control of the Dispatcher. Attendees are invited to volunteer for any of these roles. The Module Crew will provide assistance as a second crew person for engineers or in any other role. Time spent on this railroad in operations can be counted towards time in the AP Program Dispatcher category.

During the Convention, the railroad will also be running and conventioneers may bring HO trains to run on the railroad. The only condition for running your own engines and rolling stock is that the engine be equipped to run DCC (Digital Command Control). If you have a Digitrax Throttle, you can bring that, too.

We are experimenting with Operations on the modular layouts, and we need your help!

Achievement Program Attaboys By Roger Cason, MMR

Since my last report in **The Local**, the people listed below have been awarded the following Achievement Program certificates:

Division 13 - Carolina Piedmont

Edmund Dougherty - Chief Dispatcher

In a perfect world, all these names will appear in the **NMRA Bulletin**. This should not deter you from recognizing them locally. Normally you will be able to recognize an accomplishment long before the name appears in the Bulletin.

CALLBOARD — *Coming Events*

Notices must be typed and have complete addresses. Use the style shown below and be as brief as possible. Be sure to include a contact telephone number. Send items for CALLBOARD to Alan Mende, 526 Pine Hill Road, Hummelstown, PA 17036-8020 E-Mail to afmende@amp.com.

September 13, October 18, November 15, December 13, 2003, Noon to 4 PM. Northern Virginia Model Railroaders, Inc. open house. Located in historic Washington & Old Dominion Railroad station, 231 Dominion Road (at the intersection with Ayr Hill Road), Vienna, VA. There is no admission charge, though donations are accepted. More information can be obtained by going to our web site at <http://www.nvmr.org>, by e-mail at nvmrinc@hotmail.com or by calling 703-938-5157 on the day of the open house. The club meets on Tuesday evenings.

September 13 & 14, 10 AM to 4 PM. Tidewater Division, MER, Annual Model Train Show & Sale. The Virginia Beach Pavilion, 1000 19th St., Virginia Beach, VA. Admission is \$5.00 for adults, children under 12 free when accompanied by an adult. Contact: Steve Prescott at (757)-426-2811. nawneycreek@msn.com

November 15-16, 2003, 9 AM to 5 PM. Neuse River Valley Model Railroad Club. Nineteenth Annual Train and Railroadiana Show and Sale. Kerr Scott Building, NC State Fairgrounds, Raleigh, North Carolina. \$5.00 for both days. George W. Lasley (919) 834-5531 or Peter K. Hansma (919)-217-0407 P.O. Box 19573, Raleigh, NC 27619-9573. Club website: <http://www.nrvrrc.org>.

November 29, 30, December 6, 7, 2003, January 3, 4, 2004 (Jan. 10, 11 snow dates), Noon to 4 PM. Cheltenhills Model Railroad Club open house. Located at 8000 Old York Road (at railroad bridge) adjacent to Elkins Park Square, Elkins Park, PA 19027. There is no admission charge but donations will be gratefully accepted. For more information, call (215)-635-9747.

The Mid-Eastern Region will be holding its annual business meeting during the Potomac Junction convention, as it our usual practice.

This meeting will be Sunday morning with the Sunday Brunch.

MID-EASTERN REGION INC., NMRA
9 Roosevelt Ave.
Wilmington, DE 19804-3044

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MER N-Scale Special Car Order Form

Car	QUANTITY	MEMBER PRICE *	NON-MEMBER PRICE	TOTAL
#29290	_____	\$19.95	\$23.95	\$_____
#29299	_____	\$19.95	\$23.95	\$_____
TOTAL \$_____				
Shipping: _____ Cars, @ \$2.50 for first car, \$1.50 for each additional car				\$_____
* My MER # is _____		TOTAL AMOUNT ENCLOSED \$_____		



These 40' Western Maryland box cars are Micro-Train bodies custom painted by The Freight Yard. They are box car red with prominent white "speed lettering".

MAKE CHECKS PAYABLE TO
MID EASTERN REGION.

MAIL TO:
THE MID-EASTERN REGION INC.
Business Manager
9 Roosevelt Ave.
Wilmington, DE 19804-3044

The Mid-Eastern Region Inc., NMRA
An IRS Tax Exempt Organization
Business Manager
9 Roosevelt Ave.
Wilmington, DE 19804-3044

Name _____
Address _____
City _____ State _____ Zip (+4) _____
email _____
NMRA # _____ Expire Date _____
MER # _____ Expire Date _____
Scale _____ Birth date _____
Tel # _____

Make checks payable to the Mid-Eastern Region

MEMBERSHIP APPLICATION/DUES RENEWAL NOTICE

YOU MUST BE A MEMBER OF THE NATIONAL MODEL RAILROAD ASSOCIATION
TO BE A MEMBER OF THE MID-EASTERN REGION

Remittance Enclosed for:
NMRA Dues: New Renewal _____
 1 year: \$45.00 2 years: \$90.00 \$_____
*Life membership cost is based on your age.
Send your Birth Date to the NMRA for a quotation.*
Region Dues: New Renewal _____
 1 year: \$8.00 2 years: \$16.00 \$_____
Life membership cost is based on your age. Send your Birth Date to the MER for a quotation. Only NMRA Life Members qualify for MER Life Membership
MER Lapel Pin/Tie Tack @ \$6 each \$_____
MER Cloth Patch @ \$3 each \$_____
Donation \$_____
TOTAL ENCLOSED \$_____