

BUILDER'S PLATE

September 2018

Volume 1, Issue 6

Newsletter of Division 12, Mid Central Region, NMRA, Inc.

Superintendent's Report

Fall is just around the corner now that we are into September. For some that means football games and pumpkin lattes, but for model railroaders it means more time in the basement or layout room. The fall season has a number of model railroad flea markets and train shows in the region starting the weekend of September 8 and 9 with the Buffalo Terminal show. We will try and list as many as we know about on our division website.

The other big events in the fall are the model railroad tours starting in November. A number of us in the division are working against a deadline to have our layouts ready for the tours, myself included. I encourage any member with a layout, no matter what stage of construction, to participate.

We are also looking for a person to be the coordinator for the layout tour. Ed Blenner had to back out as lead person for this project. This position will entail collecting the information about each of the layouts and putting it into a guidebook. It does not need to be anything elaborate. Ed had suggested providing the following information: owner's name, address, scale of RR, room size of the model railroad, era (time frame), what RR (PRR, CSX, fictional), a couple of photos if possible to accompany a brief description of layout, and any special considerations the owner might have (parking, accessibility, or restrictions). One I wrote for my layout seven years ago for a MCR regional convention op-session follows on the next page.

Continued on page 2

Next Membership Meeting:

Our next membership meeting will be held on Saturday, September 8th at 1:00 PM at the Salamanca Rail Museum located at 170 N. Main Street, Salamanca, NY 14779.

The presentation will be from the museum staff and about the museum itself. The September 8 membership meeting will continue to have a Bring and Brag segment where members can share something they have been working on related to model railroading.

Superintendent's Report: Sample Railroad Description

Brad White-Erie PA – 2011

1. **NAME:** PRR Chautauqua Branch
2. **SCALE:** HO
3. **SIZE:** 26' by 22' Basement
PROTOTYPE/THEME: Based on PRR Chautauqua Branch that ran from Oil City, PA to Buffalo NY
4. **LOCALE:** Oil City to Mayville NY. With Pittsburgh and Buffalo staging yard. Also included on the layout is the Sligo Branch, the ERIE RR main line @ Corry and the PRR line from Erie to Warren AP.
5. **PERIOD:** 1955ish
6. **STYLE:** Single-level, Point to point with 4 multi-track staging yards
7. **HEIGHT:** 42" – 54"
8. **LENGTH OF MAINLINE:** 200' (est) of single track main with passing sidings.
9. **BENCHWORK:** L Girder, Open Grid & flat areas(yards)
10. **ROADBED:** ¾ plywood w/Homasote & Cork.
11. **TRACK:** Code 83 Flex on main line, code 70 flex on sidings and industry spurs. Main line turnouts are dispatcher or tower operator controlled. Industry and yard turnout are ether ground throws or pushrod controlled.
12. **TURNOUT MIN:** #4, #5, #6, #8 curved and some hand laid.
13. **MIN RADIUS:** 28" or greater main line, 22" industrial sidings. 18" on Sligo Branch
14. **MAX GRADE:** 3% coming out the lower staging yard
15. **TRAIN LENGTH (Avg):** Locals - 8 cars – Road freight 14 cars

16. **SCENERY CONSTRUCTION:** Combinations of plaster and foam, trees from weeds, Polyfiber fill 10% of the scenery is in.
17. **BACKDROP CONSTRUCTION:** Painted 1/8" Masonite. Started but not completed.
18. **CONTROL:** Digitrax DCC with radio/IR (Simplex) and walk around memory throttles.
19. **COMMENTS:** This layout was designed in 1998 with DCC walk around control in mind.
20. **OPERATIONS:**

Normal operations are held the 2nd Saturday of each month except July and August.

The layout has operating signals governing train movement between Bridge Tower in Oil City and EYE Tower in Corry.

Car movement is by car-card system. (note; I'm hoping to add a color code system to the way bills by the August op-session).

Timetables are used. No fast clock, I use 1 to 1 time. A special time table will be issued for the op-session.



Sample photo: Not really even Brad's railroad!

Happy Model Railroading
Brad White
Division 12, MCR, Superintendent



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Or  NMRAAlleghanyWesternDivision

Meetings

Membership meetings typically include announcements and limited business, Bring and Brag during which members share what they have been working on, and an educational model-railroad related program, presentation, or clinic.

NMRA: <https://www.nmra.org/>

Mid Central Region:

<http://www.midcentral-region-nmra.org/>

Division 12 Superintendent:

Superintendent@div12mcr.org



Officers and BOD

Superintendent: Brad White—
superintendent@div12mcr.org

Assistant Superintendent: Mike Hauk

Clerk/Treasurer: Dave Ellis—
clerk@div12mcr.org

Board of Directors: Dick Bradley, Doug Sandmeyer, Chris Mincemoyer

Division 12 Upcoming Events

September: Membership meeting: Saturday, September 8 at 1:00 at the Salamanca Railroad Museum.

September: Board of Directors meeting: Saturday, September 29, at 10:00 AM at the Cambridge Springs Trolley Station. Planning for November Division 12 events: Erie Train Show, T-Trak Displays, NMRA Layout tours.

October: Membership meeting: Erie area meeting with presentation on operations on a model railroad and then operating on the railroad after the meeting. Date to be determined.

November: Public Event(s): Erie Train Show and possible other public demonstrations of Division 12 T-Trak layout. NMRA only event: Layout tours. (Also open to Divisions 2, 5, and 11?)

The *Builder's Plate* is a publication of Division 12, Mid Central Region, NMRA. All opinions expressed are those of the authors, and do not necessarily reflect those of Division 12, the MCR, or the NMRA.

Editor: David Ellis

Upcoming Model Railroad Events

Central Terminal Train Show: September 8 and 9, 2018

The Buffalo Terminal show has operating train layouts, door prizes, and plenty of model trains and accessories for sale. The show will be at 495 Paderewski Drive, Buffalo, NY 14212 and is open from 10 AM – 4 PM with a \$5:00 fee.

NMRA Division 4 Great Berea Train Show: October 6 and 7, 2018

Please see the special notice.

Erie Model Train Show: November 4, 2018

The Erie show will be held in Rainbow Gardens, 200 Peninsula Drive, Millcreek, PA from 10 AM – 4 PM.

Greenberg Train Show: November 10 & 11, 2018

Monroeville, PA 10 AM – 4 PM. Pittsburgh area public train show.

Mid Central Region Convention: May 2 – 5, 2019

Our region's yearly convention, *The Bullet 2019*, is relatively close this year, in Boardman Ohio.

Links to upcoming model railroad events can be found on the Division 12 Website:

<http://www.div12mcr.org>

Use the search button on the "Welcome" page or use the "News/Events" page, either by scrolling or clicking on the "Train Shows and Conventions" category link.

If you are aware of upcoming railroad events, please let the *Builder's Plate* editor and the webmaster know, so that we can list them.

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Ops-Session opportunity:

Division 12 members have been invited to join with the I-80 group for an operations session in Clarion, PA at Bob Hartle's son's Conrail Low-Grade on September 15 with a start time of 1:00 PM.

Brad White is organizing a crew call, which will be sent out by email on Monday, September 10. Participation in the ops session will be based on first responses to the emailed crew call.

Modeler's Project:

Signaling without Electronics on the Baltimore and Lehigh

by Bill Schopf



I have a revelation. I have a chronic health issue — a disease some might call EADD, otherwise known in the broader modeling community as Electronic Attention Deficit Disorder. You start talking diode matrixes, capacitor discharge, CTC, control logic ...you may as well be singing in a Bulgarian mountain dialect. I have no idea what you're saying.

So when I converted my layout to DCC from DC several years ago, I made a pact with myself that I would keep wiring and electronics to a minimum. My brother-in-law wired in circuit breakers for my three DCC districts. That was beyond me. I could twist and hang the bus, wire feeders to it and maybe figure out if it had any voltage. And with lots of written instructions I could even wire in Tam Valley Singlets to power my turnouts. For most modelers that was sort of beyond simple. But I could read the directions for forty-five minutes (or in some cases an hour and forty-five minutes) and then do it. Two wires out of the bus, two wires into a circuit board with no soldering necessary, and a couple of wires to the pushbuttons on the fascia. Presto. It usually worked. Not always. But usually. Twenty-

minute jobs might take two hours, but, hey, it's a hobby.

A signaling system for my Baltimore and Lehigh Railroad? No way was I getting into that. One peek under layouts I visited that used CTC and JMRI, and EADD took over. So I came to love those older railroads that "ran in the dark." No signals. No semaphores. Maybe just some guy like me out by the tracks waving colored flags at trains passing by. And that's what I would have been doing on the real thing in 1928 or 1938 or 1948 — waving a flag, maybe purple or chartreuse — at an unsuspecting engineer. "But, hey boss, it was a flag, wasn't it? What you so upset about?"

Still the hankering was there. Signaling would be cool. Working on other layouts, I saw how it enhanced operations. But no way was I getting into the electronics of it. Then in the April 2017 seventy-fifth anniversary issue of *Model Railroader*, I saw what might be my answer. An article by Bruce Carpenter "A Signal System to Fit any Railroad." A manual signaling system with no electronics. Removable masts with paper signal heads that could be interchanged with different signal indications to instruct engineers what to do.

The concept was beautiful. Carpenter calls it "Human Model Railroad Interface" (or HMRI), a dummy's alternative to Java Model Railroad Interface (JMRI). But, as Carpenter says, "without the hardware, wiring and programming." Carpenter's idea was great. But I didn't care for the appearance of his signals. He took photos off the Internet of semaphore signal heads, resized them to HO scale, printed them on photo paper, cut them to size, and laminated them for strength. He came up with nine two-head signals. He then installed them to what appears to be a type of butterfly paper clip alongside the

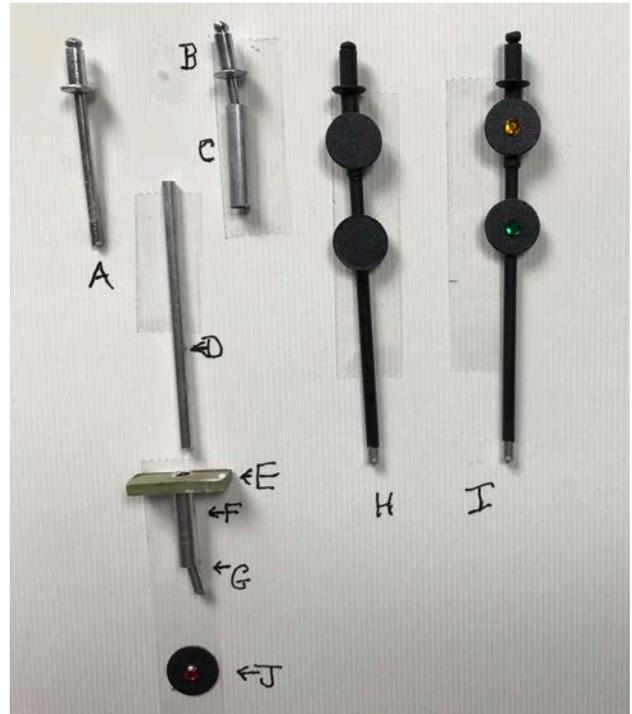
tracks. I loved the concept. But the overall appearance left me a bit cold.

I wanted something more prototypical. But I wanted it simple. I wanted a two-head signal on a mast that looked reasonable — not stupendous, just reasonable. I didn't want the more complicated signal heads of the Pennsy. Just two lights on the two heads mounted on a mast. I toyed with the idea of Reading's banjo-head type signals that were still in use in the era of my railroad — late 1940s. But scissoring out a hundred or so exact banjo shaped heads wasn't appealing. Then on the Internet I found exactly what I wanted: a two head mast on the Atlantic Coast Lines in rural Virginia. Perfect. Virginia was close enough for me to Pennsylvania's anthracite country on my fictional layout. Now, to do it.

After a lot of thought, it turned out to be pretty simple to do. I used 1/8 and 3/32 inch K&S tubing (either copper or aluminum will work), 1/8 x 1/8 inch pop rivets from Home Depot, dollhouse sized bricks that I found in the dollhouse section at AC Moore, the smallest sequins (red, yellow and green) the craft stores carry, and a series of 3/8 inch disks that I cut out of somewhat thick black cardstock with one of my wife's hole cutting tools. This tool is essential. Pretty much all of these but the rivets are available at your favorite craft store.

For the mounting base, you can be flexible. I liked the synthetic bricks because they drill easier than wood. Drilling a small piece of wood will often shatter the grain and split it in two. Synthetic plastics and resins don't do that. My base pieces were about 3/8 inch thick, 1/4 inch wide and 3/4 inch long. I drilled a 1/8 inch hole into the center of the base and wiggled the bit some to slightly enlarge the hole for an easier later insertion of the mast. Then I cut a piece of 1/8 inch tubing about 3/4 inch long and glued it into the base with CA cement. Get a good bond on this. You

want this joint permanent. The piece of tubing should be flush with one side and stick out about 1/2 inch on the other side. At the base of this tubing insert and glue a shorter (about 1/2 inch) piece of 3/32 inch tubing. This will leave about 1/4 inch opening at the top and act as a stop when you later insert the mast down through the brick. The rod protruding from the bottom of the base will be later inserted next to the railbed. See "E", "F" and "G" in photo.



Now to build the mast to slip into the 1/8 inch base tubing. The 1/8 x 1/8 inch rivets will fit into 1/8 inch tubing but not 3/32 inch tubing. So with my razor saw I cut about a two inch long piece of 3/32 inch tubing for the mast to fit into the 1/8 inch base hole. Then I cut about a 3/4 inch long piece of the 1/8 inch tubing. Glue this short piece to one end of the 3/32 inch tube. Snip off the pop rivet shaft about 3/8 inch below the actual rivet and glue with CA into the other end of the short 1/8 inch tubing. Now you have a mast about 3 inches high (about 22 scale HO feet). Spray with a cheap black primer and let it thoroughly dry. You can play with the lengths of these pieces until you find a

height and style that looks best to your eye. See "A", "B", "C", and "D" in photo.

The signal heads are straightforward. My wife's hole cutting disks are hard metal with various sized diameter cutting heads. You can get these online or probably at a good craft store like Hobby Lobby. I have no idea where she got hers but it is a well used tool in her craft room. Place the black cardstock on a piece of plywood, take a hammer and give the non-cutting end of the cutter a good rap. Presto, you have a circular head. I chose to make mine 3/8 inch in diameter. You will need to make a lot of these.

Then get out your sequins and a pair of fine-pointed tweezers to pick them up. Using a fine tipped applicator, carefully apply a drop of CA to the back side of the sequin and glue to the center of the disk. Using tweezers and with practice, this becomes a simple operation. A tip here. Get a fresh bottle of CA and don't use a bottle that has been opened for a couple of months. Unless refrigerated, this stuff loses its punch fast. See "J" in photo.

As I mentioned, I only needed red, yellow, and green sequins for the heads. Save the others for some other project or ingratiate yourself to your wife and give them to her. "Gee, honey, thanks so much. What a gift." The sequined head combinations I came up with were these seven:

Red over red — Absolute stop. Do not proceed until signal changes.

Red over green — Proceed at restricted speed on to crossover.

Red over yellow — Proceed at restricted speed on to diverging route or siding.

Yellow over yellow — At entrances to all yards. Stop and proceed at restricted speed.

Yellow over red — Proceed at authorized speed, but prepare to stop at next signal.

Yellow over green — Proceed at medium speed, but prepare to stop at next signal.

Green over red — Proceed at authorized speed.

These signal combinations were pretty much arbitrarily mine although I did try to base them on two head signals that I researched. What you choose for head indications and combinations and speeds is entirely up to you.

Now to finish off the mast. On the thoroughly dry mast (let dry overnight or even 24 hours for better glue bonds), glue the two signal heads you have chosen over one another. I would apply several spots of CA and risk having a bit of glue showing because these masts will be physically handled a lot. I plan on going back over mine and refreshing the glue bond with absolutely fresh CA. Before you do a lot of these I would take a piece of scrap plywood and drill a bunch of 5/32 inch holes about 1/2 inch deep into the wood. As you complete the gluing on each mast insert it into the hole and let them dry upright. If you lay them down, you risk them turning slightly to the side and being out of alignment. See "H" and "I" in photo for the raw and finished versions of the mast.

A warning. You will need to make lots of these. I probably made at least eight to ten of each. And the ones used a lot (yellow over yellow and red over red) maybe fifteen to twenty. When they are all dried, glued and sturdy, you are ready to install. Figure out where you want to place these trackside. Remember you need to signal in both directions so you will use a lot of them. Get out the zillion or so little bases you tediously made. Drill holes into your layout beside the track. I would make the holes slightly larger to make it easier to push into the layout material. A 5/32 inch hole drilled with a little wiggle would work well. The Aleen's glue will act as a filler as well. Insert the tube end of the base into the

hole with a shot of the glue. Be sure to take into account track clearance so the train doesn't hit the mast. How do you possibly think I would know that? Me, the modeler of minimal clearances. I never saw an NMRA clearance gauge that I couldn't ignore.

Let the glue on the base dry. I like Aleen's because it makes a rock solid bond and dries in minutes but still with a little play-time at the beginning to make adjustments. Aleen's Fast Grab tacky glue is available at all craft stores. Then start inserting your signals. Obviously, do not glue these signal masts into the base as you will want to remove them and replace with other signals as the train proceeds down the tracks. If you remembered to install the stop in the bottom of the base tubing, the mast will slide down the 1/4 inch or so and stop.



I put yellow over yellow at the entrance to every yard and elsewhere began with lots of red over reds. That makes trains stop and wait and let the dispatcher figure things out for you. My layout is not that large and distances between towns are short. So I want slower movement. The size of your layout, the number of turnouts you have, and just plain old personal preference will dictate how many signal heads of each type you will need.

One final, very important word. I tried on two occasions to act as my own signaling dispatcher during op sessions. It did not work. At all. After 10 minutes I told operators to forget it and let's do a "mother-may-I-go" routine. But at my last op session in early August, I conscripted Brad White to do dispatching and setting the signals. Brad was armed with a cigar box of the signal masts and a copy of the train sequences. And for the first time I think it really worked. I could answer operator's questions, set up the next train in the sequence and generally trouble shoot the session. But I didn't have to think about throwing the signals. I thank Brad for the great job he did. So one of my required operator duties going forward will be just to handle the signals, which is actually running the railroad. Maybe Brad has a permanent job! Or guys who want to work towards the MMR certificate in operations can check off two to three hours of dispatching work.

So in the words of Bruce Carpenter, you are now operating an alternate version of JMRI. But it sounds good, doesn't it? Human Model Railroad Interface (HMRI). I think it has a real ring to it.

Reflection from a Member:

I decided to rejoin NMRA in 2017 for two reasons. First, so I could visit local layouts and attend regional layout tours when possible. Second, I felt as a member of a division this membership would provide exposure to many new railroaders and issues I would encounter as I started to build my new HO layout. Also, I would learn new ideas and techniques that could be used to build this layout.

Mid 2018 update: So far, early expectations have been met as I continue to finish the stand-alone building and consider funding for the heat project scheduled this fall.

Larry Dodge

Planning Future Programs and Clinics:

Thoughts from the editor

As the officers and board of directors of Division 12 prepare to meet at the end of September, a central topic on our agenda will be planning for next year. As Larry mentioned in his reflection above, "learning new ideas and techniques" is an important reason for his membership in the division. Education and developing skills are stated purposes of our organization. To plan effectively though, we need to match our programs, clinics, presentations, and articles with the needs and desires of the membership. We surveyed the initial membership at our first meeting, but we have been growing. (A good thing!) A first step towards getting input for next year is to revisit those initial survey results. Please contact any of the officers or board

members to add to or help prioritize our lists.

Our first list focuses on the needs or wants of the membership: what topics are members interested in learning more about? While the list includes more than fifteen individual topics, it also breaks down into five or six categories. The first is electronics and control systems such as DCC, LCC, and JMRI. DCC was the most listed topic of all with several members with specific DCC considerations such as installing sound decoders. The second-most popular category, scenery, was listed multiple times as were specific topics such as tree making and static grass application. A third category, operations, was listed several times with specific topics such as TT&TO and modern ops also listed. Modeling and modeling techniques included specifics such as airbrushing, weathering, structure building, resistance soldering, and using different kinds of glue. Local railroad history and layout construction were also mentioned.

We also have a list of the initial member's experience and skills. We will be consulting that list as we build future programs, either for normal meetings or any mini-conventions we may plan. I have heard several comments that having more hands on or make it-take it kind of clinics would be desirable. At a recent meeting a discussion developed around having some kind of mentor program, where experienced modelers would be available to help newer modelers or modelers trying something totally new to them. Again, please contact officers or board members with your thoughts about how to best improve your model railroading skills.

Newsletter Submissions!

To publish the *Builder's Plate* every month (our goal) we need submissions from the members. Modeler's tips, modeler's projects, and any railroad or modeling related stories make excellent submissions. You don't need to be an officer or board member to submit a short article. Write it up and submit it as a Word document attached to an email to clerk@div12mcr.org.

Committee Chairs and Volunteer Positions:

Achievement Program: Mike Hauk
ap@div12mcr.org

Newsletter: Dave Ellis
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Operations Coordinator: Jason Graves
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T-Trak: Doug Sandmeyer
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Webmaster: Chris Mincemoyer
webeditor@div12mcr.org

NMRA Partnership Program

The NMRA Partnership Program is a member benefit that truly has a tangible payback. The NMRA has partnered with model railroad manufacturers of all sizes, giving them exposure on the NMRA website in return for receiving generous discounts for NMRA members all year long. Some provide members with special codes, others prefer a phone or email order, but all appreciate the additional business from our members. And of course, our members appreciate the extra savings - savings that can actually pay the cost of NMRA membership! For complete descriptions of the partners, the discount they offer, and instructions on applying the discount on your order visit the NMRA Partnership website (<https://www.nmra.org/partnerships>). If you are not signed in as a member, you will only see a list of the partners offering the discounts. To see the instructions on how to apply the discounts you need to register or log in as a registered member. If you have not registered, here is a [FAQ](#) with instructions for how to register at the NMRA website.