

BUILDER'S PLATE

April 2019

Volume 2, Issue 3

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

Superintendent's Report

We are well into our second year as a division in the MCR and plans are moving forward for informative meetings and learning opportunities. Our schedule for the year has been finalized and you should find it in this newsletter.

The other item that should be finalized soon is the specific date and location for the Alleghany Western Mini-Meet. This is our division's main fundraiser for 2019. While your BOD has stepped up to be co-chairs for this event, it will take other volunteers to make it a success. First and foremost I hope most, if not all, of our members will be able to attend.

Setting up and running this and next year's mini-meets will be good practice for running the

2021 Regional Convention. So, please keep in mind how you may be able to help. There will be letters to be sent, phone calls to be made, registration table to be staffed, model room to be monitored, the White Elephant sale to be run, AV equipment to be setup, and the hospitality room to be maintained.

One final thought for this month's letter is reflection on our participation in the Division 5 show (Railfest 2019) this past March. All of your board members plus a few other division members staffed the table over the two days.

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Next Membership Event:

Our next membership meeting will be held on Saturday, April 13 at 1:00 PM at the Lake Shore Railway Historical Society located at 31 Wall Street, North East, PA 16428. The program will include a presentation from the museum staff and a program on tank cars by Rich Kasperzak. The "What's on Your Workbench" theme will be progress on wooden block, scratch built structures from last month's clinic. Our Social Committee chair is organizing an optional lunch gathering. Please read his report for the details, and remember Rule G is in effect ☺



I will say our division's table was the most impressive of the three divisions represented at the show. We had our T-TRAK layout up and running. While we may not have signed up any new members, we did fulfill our education role. We had many people ask questions about DCC, T-TRAK, model trains in general, and the NMRA.

Late on Sunday afternoon I asked the remaining board members what they thought about our role at the show, and we all agreed it was worth the time and effort.

Happy Model Railroading

Brad White
Division 12 MCR
Superintendent



Division 12, MCR, NMRA, Inc.
The Alleghany Western Division:
Expanding your model railroading horizons

Please visit our website: www.div12mcr.org

Or  NMRAAlleghanyWesternDivision

Meetings

Membership meetings typically include announcements and limited business; What's On Your Workbench, during which members share what they have been working on; and educational model-railroad related programs, presentations, or clinics.

NMRA: <https://www.nmra.org/>
Mid Central Region:
<http://www.midcentral-region-nmra.org/>

Division 12 Superintendent:
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Officers and BOD

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Clerk/Treasurer: Dave Ellis —
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Board of Directors: Rob Bennett, Doug
Sandmeyer, Chris Mincemoyer

Division 12 Upcoming Events

April: Membership meeting: 1:00 PM April 13, 2019 at the Lake Shore Railway Historical Society located at 31 Wall Street, North East, PA 16428. Program: from museum staff and presentation on tank cars. If attending the optional lunch at the Skunk and Goat at 11:00 AM, contact social@div12mcr.org.

May: NMRA Mid Central Region Convention: May 2-5. Division 12 members are volunteering and some of our T-TRAK group will be participating in a large T-TRAK layout. As it is right next-door this year, we are hoping to have a significant Division 12 turnout at The Bullet 2019, our regional convention.

June: Between the Rails: Division 12 is hosting a picnic and train watching, joining with other railroad enthusiasts at the North Gale Street picnic area in Westfield, NY on June 8, 2019 starting at noon.

July: Membership Meeting: 10:00 AM July 13, 2019 at the Cambridge Springs Trolley Station. Program: Three different weathering techniques with presentation, demonstrations, and an opportunity to try one out.

July: Jefferson Train Show: July 20, 2019 in Jefferson, Ohio. We will have our T-TRAK layout and information at this train show.

August: Membership Meeting: 10:00 AM August 10, 2019 at the Cambridge Springs Trolley Station. Program: Modeling electrical equipment as large loads, and using DCC lighting decoders.

September: Alleghany Western Mini-Meet 2019: Details coming soon!

October: Membership Meeting: 10:00 AM October 12, 2019 at the Cambridge Springs Trolley Station. Program: Mini-Meet after action reflection and ongoing planning for 2021 regional convention.

November: Erie Train Show: November 3, 2019 at Rainbow Gardens. Division 12 will have its T-TRAK layout, consignment sales, and information table as well as clinic presentations.

November: Model Railroad Tours: November 11, 2019. Division 12 will showcase some of its members' layouts. We are hoping for better weather this year!

December: Christmas Party: December 14, 2019 from 1:00 – 4:00 PM at Hoss's Steak and Sea House in Erie again this year.

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.

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Copyeditor/Proofreader: Renee Reilly

Upcoming Model Railroad Events

2019 Pittsburgh Model Railroad Jamboree – April 27, 2019

Located on the campus of Robert Morris University in Yorktown Hall. Early registration is recommended, limited registrations will be available at the door. For more information check out their website at <https://www.keystonedivision.org/jamboree.html>

Central New York Division Op till You Drop Weekend April 27 and 28, 2019

Mid Central Region Convention: May 2 – 5, 2019

Our region's yearly convention, *The Bullet 2019*, is relatively close this year, in Boardman, Ohio. Please note the request for volunteers from Division 12 in this issue of the *Builder's Plate*.

Links to these and additional 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.
Editor: clerk@div12mcr.org
Webmaster: webeditor@div12mcr.org



Lee Farnsworth and Dick Bradley represented Division 12 at RPM East 2019 held in Greensburg, PA. They report having had a good time there. They saw old friends, met new people, and gained some new information.

Social Committee Report

Lee reports that the Division 12 apparel has arrived and looks sharp. He will distribute orders at the upcoming April meeting.

Also, for the April meeting in North East, he is inviting members to gather for lunch at the [Skunk and Goat Tavern](#) at 11:00 AM. Please contact him at social@div12mcr.com if you are planning to attend, so he can contact the restaurant with numbers for the reservation.



Mini-Meet Committee Report:

Mike Hauk and I met with a representative of VisitErie on April 4. [VisitErie](#) is a nonprofit that provides convention services, including gathering proposals from different venues, at no cost. We discussed what we see needing for the September mini-meet as well as the 2021 regional convention. They are sending out requests for proposals to a variety of Erie venues based on our requirements.

For the mini-meet we suggested we needed a venue able to support the following:

- One-day event, on a Saturday in September (the 14th?)

- Hoping for attendance of approximately 50 (many from our division, but some from adjoining divisions/regions)
- Registration with continental breakfast
- Question of box lunch provided vs. on your own?
- T-TRAK on display (one or two tables)
- Two clinic rooms, classroom set-up (audio/visual) with each having two 45 minute clinics in the morning and two in the afternoon (Eight total clinics)
- Space for white elephant sales, contest display, merit award judging
- Space for Raffle
- Layout tours/ops-sessions off-site Friday and/or Saturday nights
- Maybe a few will need accommodations? (quote a rate, but not reserve a block of rooms)

We are expecting to hear back from the venues by April 12. The next step will be to conduct site visits, which will also be arranged with the assistance of VisitErie. Honestly, this would be overwhelming without them.

David Ellis
Clerk/Treasurer
clerk@div12mcr.org

The Mystery of Dirty Track Or How the ____ Do I Get the Crud off the Track

By Bill Schopf

One of the biggest unanswered questions in model railroading is how to clean track and wheel sets? And, more importantly, how to make them stay clean? Examine the hobby press and you uncover dozens of answers. Everyone, it seems, has a different solution. And for any one solution, you can find someone who debunks it. But is any one method the absolute best? Or do any of them really work? Is it possible to really clean commercial nickel silver or brass rail and the “steel” or plastic wheels of rolling stock and locomotives? And, more importantly, keep them clean for an extended period. If so, how?

First, some disclaimers.

Disclaimer #1: I am not an expert on this subject. I am not a chemist. I am not an electrical engineer. I am not a physicist. I do not understand the relative conductivity of metals. But what I do know is that I have read extensively on this subject. And I also know that the more I read the more confused I get. I’ve tried countless methods, but the crud continues to plague my track.

Disclaimer #2: Most of the information I have gotten comes from the hobby press and internet blogs. It is not from MIT or the Stanford University School of Engineering. Model railroad blog info is what all Internet blog info is — read and believe at your own risk. Other information has come from talking with fellow model railroaders.

Disclaimer #3: I do not intend to offer definitive answers. I am only tossing out theories, suggestions and questions. My aim is to provoke thought. None of the information presented here is absolutely definitive.

Following are ten proposals of some of the better-known (and perhaps some of the lesser-known) methods of track cleaning. When possible, I have tried to offer positive and negative viewpoints towards each, sometimes mixing in my own personal biases. Hopefully you find some of the ideas absurd and laughable and others workable and functional. Many you may have tried. Some probably worked at least a bit. Some probably failed. Maybe one of these you haven’t tried, and just maybe it will work for you. Don’t hold your breath that it will, but here goes — my attempt to answer the ultimate puzzle: Just how the ____ do I get the crud off my track?

Proposal #1: Keep your train room clean and free of dust. Don’t smoke in the layout room. Don’t use locomotives that expel smoke. Keep dogs and cats out. If possible, have year-round AC and heat control to stabilize the environment. Clean wheels of rolling stock annually. Clean locomotive wheels more frequently.

And vacuum, vacuum, vacuum. No matter what we do or where we live, dust and debris are inevitable. If your attic or basement has a concrete floor or unsealed wall or open ceiling — all sources of dust — or if you require open windows for ventilation, then you’ll need to vacuum even more. But what about the vacuuming process itself? Unless you have a HEPA filter on your vacuum cleaner, you are likely throwing much of the dust and grime right back on your rails. Trust me. There is no easy answer to all this.

Simply vacuuming the dust doesn’t attack the major problem of the crud we deal with — that black stuff caked on our

rails that sometimes seems that it would need a nuclear explosion to remove. What is this crud? And where does it come from? A general consensus is that the black gunk we scrub from our rails is the result of what is termed micro-arcing. Non-conductive metal oxides (i.e. gunk) chemically form from the tiny sparking of locomotive wheels against metal rails that actually burns and blackens dust and the various types of micro debris that falls on rails — nickel silver and brass alike. Turn down your train room lights and look closely at the locomotive wheels as they roll down the track. You will very likely see these tiny sparks and micro fires on the track. It occurs with both DCC and DC. The solution? Probably none, unless you discard your electrical system and go to battery controlled locomotives.

Proposal #2: Throw out all brass track and use just nickel silver.

The theory behind this is that copper and zinc (the main ingredients of brass) -- oxidize — and thus corrode — much faster than nickel silver. Brass might conduct better but it is softer and scratches more easily than nickel silver. Years ago when I used all brass track, I exhausted Bright Boys and the oxidation seemed endless. So I switched to nickel silver because it stayed cleaner. Supposedly. And I figured it had silver in it so it had to be better.

But guess what? Nickel silver track contains no silver at all and only a small amount of nickel. Depending on the manufacturer, nickel silver track is roughly 65% copper, 20-25% zinc, and 10-15% nickel with traces of manganese. So chemically, about the only thing that makes nickel silver rail different than brass rail is the small amount of nickel. But the physical basis of both nickel silver and brass track is essentially copper and zinc. And that's why nickel silver rail can accumulate crud almost as fast as brass. My experience is that it does.

Proposal #3: Do not use abrasive cleaners.

The hobby press is filled with warnings not to use any kind of sandpaper or kitchen scrubber type of abrasive. Be careful even with the standard type of "Bright Boy" type cleaners. The theory here is that any abrasive will etch tiny scratches into the track that will act as traps for the dust and subsequent gunk buildup.

True or not true? I have read of at least one heretic modeler who used medium grit sandpaper (180-220 grit) on his track, claimed great results and had no issues with the scratched section of track collecting gunk any more than carefully polished track. Another recommends 250 grit sheetrock sanding mesh blocks! These cleaning solutions are not mainstream, however. If you use sandpaper, most recommendations are to use a very fine grit (500 grit or greater — perhaps even 800 to 1000 grit or higher) that will clean and polish.

Whatever you use, however — Bright Boy, sandpaper or any abrasive cleaner — be sure to vacuum afterwards because the loose residue from the grit of the cleaner will cover the track and must be removed or it will reattach itself to driver wheels and wheel sets and compound the problem.

Proposal #4: Goo Gone and Wahl's clipper oil are two ultimate answers.

These products could be called deoxidants as well as conductivity enhancers. They are applied to sections of the track and then spread around by locomotives to disperse them through all your track. The CRC lubricant in Proposal #10 is also one of this type, but in my opinion much safer and less problematic.

Truthfully, the hobby press is full of modelers who find Goo Gone the ultimate

problem, not the answer. On first glance, it cleans beautifully. The cloth dabbed with Goo Gone will have heavy black streaks indicating the removal of gunk from the rails. Then a subsequent polishing with a clean cloth seems to indicate the removal of the Goo Gone.

But Goo Gone is not so easily gone from what I have read. Within a month or two, conductivity seems much worse than before the application of the Goo Gone, modelers have found. And the dirty track issue only worsens — at a faster rate than with other cleaning methods. To completely remove the Goo Gone takes hours and hours, if not weeks and weeks, of hard work and cleaning. The majority of modelers who have used it -- swear at it and not for it. The suggestion: Use Goo Gone at your own peril.

I have never used Wahl's clipper oil, but one modeler I know put it on his track and needed nearly a year to finally get the entire clipper oil residue off his rails. Perhaps he doused his track too heavily. I don't know. But it was in his words a nightmare. The warning with both of these products is that if you use them, use very sparingly. Don't follow mom's advice for a stomach ache: if a little Bromoseltzer does a little good, a lot will do a lot of good. These products don't work that way.

Proposal #5: Use liquid cleaners like isopropyl alcohol, lacquer thinner, acetone or paint thinner.

Isopropyl alcohol in 70%, 91% or 99% concentrations has long been a standard for cleaning track and wheels of both locomotives and rolling stock. Letting locomotive drivers spin on Handi Wipes soaked in it and rubbing Handi Wipes back and forth over rails and wheel sets seems to produce excellent results. Many modelers report even better and faster results with lacquer thinner, paint thinner, and acetone. The secondary problems with

these products are pretty obvious, however. They are all highly flammable and emit strong odors which we should avoid inhaling. Used carefully, however, they work.

Joe Fugate of *Model Railroad Hobbyist* proposes an opposing point of view. He argues that chemists will tell you that these "polar solvents" like acetone and lacquer thinner contain electrical charges and any of their residues left on the track encourage the attraction and micro-arcing of dust particles when electrical current is applied. Take or leave his advice. But use of these products as cleaning agents is controversial and we really have no definitive answer. If you've used them and they work, continue to use them. Fugate could well be wrong.

Cheaper home cleaners have also been noted but many of these are weak and clean only with lots of elbow grease. The following products have been used with reported degrees of success by modelers who blog: WD-40, kerosene, ammonia, tire cleaners and Armor All. No recommendations on any of these from here. Just saying what some folks have done.

Proposal #6: Run trains a lot.

The theory here is that the downward force of the wheels on the rails creates a polishing effect. The heavier the force, the better. Weighted cars by this theory polish more than non-weighted cars. In this way of thinking HO scale trains polish better and produce cleaner track than N scale trains. O scale more than HO scale. G scale more than O scale. Just go out and look at the nearest real tracks in your area. The rail tops are bright and shiny. So if we really want clean rails, maybe we should just buy some power from GE and run our own locomotives in the back yard. Competition for CSX? Plus, if we buy from

GE, consider how we help the local economy.

Seriously, though, there is another side to this issue. Does this downward force of our miniature trains simply pressure the dirt and grime into the rail where it can be micro-arc'd even more efficiently into gunk through the electrical activities going on? Do running trains frequently polish? Or hammer in the dirt? No definitive answer.

Proposal #7: Put a Keep Alive or Current Keeper in all your locomotives and dirty track will no longer be an issue.

There is probably a lot of truth to this. But for modelers who are not running DCC, this new decoder technology is not an option. Plus the Keep Alive has cost and installation factors. And the Keep Alive does not clean track. Someday the track will get so dirty that not even the capacitor in the Keep Alive will keep the train running long enough to escape the dirty section of track because all the sections of track will be dirty.

But anyone running DCC and a Keep Alive will tell you that the small deposits of crud on the track that cause those nagging mini-interruptions that turn off headlights and produce jerky movements become a non-issue with the Keep Alive. Tests have shown that the capacitors in them provide 10 seconds or so (some claim more) of power over rails that normally would not conduct. They are certainly a God-send for dirty track — but not filthy track.

Proposal #8: Use the old standby — the Masonite track cleaning sled.

Sometimes called the "John Allen track cleaning car," this technique has been around since Allen popularized it in the hobby publications 60 or so years ago

as a way to keep his legendary Gorre and Daphetid RR running smoothly. If you want to build one of these, a Google search will provide dozens of articles and YouTube videos. Basically, it is a small pad of Masonite slightly wider than the rails attached to the bottom of a piece of rolling stock. The heavier the sled and car, the better. The extra weight helps stabilize the car through turnouts and weights on the Masonite itself produce more friction on the track.

The Masonite sled probably won't wipe away the really bad crud, but it will remove dust, light grime and by-products of the oxidation of the copper and zinc on the rail. Plus it will polish the rail heads and generally make them more conductive. Additionally, the Masonite sled disguised in a box car, caboose or gondola can be run continually in your train consists and clean while we play. Use of the sled does not entail shutting down the layout for cleaning. It cleans as we go. Not a bad option.

Proposal #9: Use one of the many commercial track cleaning cars or tools now available.

Woodland Scenics makes a really cool product called Tidy Tracks that enables cleaning of track in tight and difficult to reach places. They also sell as part of their system Dust Monkeys — an innovative pad that clips on to the trucks of a boxcar — that has received positive reviews.

I use Aztec's cleaning car (TS1163) that contains a Roundhouse C&O boxcar with two Cratex rollers that are slightly skewed to the rails to provide extra friction and pressure. From the residue left on the rollers after a cleaning session, it does appear to work. It's recommended that the Cratex roller box car be run back and forth several times on each section of track for thorough cleaning.

Gary Reynolds, a Buffalo modeler, introduced me to a locomotive wheel cleaning brush from TRIX (#66602). Two parallel brass contacts straddle the track and set on the railheads. They then transfer power to brass brushes on top of the unit. Hold and press the locomotive on the brushes to keep the locomotive from moving, fire up the power and let the wheels spin and polish. The brush in the unit is short, though -- only four inches long. So you will need to buy two units to work in tandem to clean all but the very shortest wheelbases of your engine fleet. Again, a concern is the scratching of the driver wheels. Does the action of spinning brass on wheels damage the wheels? Reynolds and his club members in Buffalo say there is no problem and they have been using it for years with success. I use the TRIX tool, but with a bit of fear and trembling in the pit of my stomach as I do.

At one time Atlas made an aesthetically ugly track-cleaning car. It performed multiple functions with discs polishing rail, liquid dampened pads cleaning rail, and a vacuum that picked up loose junk as it lumbered down the tracks behind a powered locomotive. The cleaning car was DCC ready and needed a decoder to run the vacuum. The polishing and cleaning capabilities were okay, I thought, but the vacuum was superb and it was entertaining to hear it whirl along and listen for the clunk of unseen spikes and solder clumps sucked into its guts.

Numerous other commercial cleaning cars ranging in price from \$30 and up into the \$100s are available. Check the Internet or Walthers catalog for some of the products by these manufacturers — Aztec, Centerline, Jam Creations, Tomytec, Walthers Trainline, IHC, and the CMX Clean Machine from Tony's Train Exchange.

A Google or You Tube search can turn up any number of innovative

homemade cleaning cars. One I found particularly appealing included magnets attached to the underside of a car underbody to pick up metallic debris left over from soldering and Brite Boy residue. There are a remarkable number of these cars demonstrated in blogs and internet videos.

Proposal #10: Try any of the newer products now on store shelves (available from Home Depot).

CRC 2-26 lubricant and CRC QD Contact Cleaner -- I have used these two aerosol products with great results, a drop of the lubricant every 10 feet or so of track greatly increases electrical contact. The lubricant does not clean, it only enhances conductivity. Again, a word of caution. A little does a lot of good. Do not overdo it.

The contact cleaner, however, does clean. It works beautifully on turnouts like Pecos that rely for power on contact between the stock rail and point rail. A gentle scrubbing of that contact point on both rails with a micro-tip brush every couple of months does wonders in keeping the electricity flowing between stock and point rails. It dries quickly and leaves no residue. In over three years since I converted from Atlas turnouts to Pecos, I have yet to have a Peco cause me problems because of poor contact at this junction. Dirty track on the turnout that needed a polish and cleaning with the Brite Boy, yes. But not at the point rail-stock rail contact. This stuff works.

Three other products I have read about but not used are listed below. They are highly recommended and may merit your consideration:

1. ACT-6006, a cleaner and lubricant from Aero-Car Hobby Lubricants. Modelers who have used this stuff rave about it. Website — www.aclubes.com

2. No_Ox-ID from Sanchem. Once distributed by Bar Mills, this stuff is supposedly a miracle cure for gunk. But the procedure for using it seems long and tedious and would appear to be a nightmare for a large layout. For smaller layouts it could do wonders.

Website — www.sanchem.com

3. DeoxIT D-5 by Caig. This aerosol compound supposedly increases conductivity on the rails plus cleans and lubricates in one application. Website — www.caig.com

Of these three, personally, I will try the ACT-6006 and DeoxIT D-5. Google them and see what you think.

Proposal #11: A bonus ... I promised you ten, but you get eleven if you read this far.

Among the elements that conduct best, silver and gold are near the top. For optimum conductivity, manufacture your own rail out of either. Pure gold would be best because it would oxidize less. Pure silver would be a cool second choice. Caution: Use only if you just won the Powerball Lottery.

Conclusion: ???

So, what do you, the members of Division 12, think? Are any of these better than the others? Worse? Perhaps down the line we could have a roundtable forum at a monthly meeting to discuss the topic and share ideas. I for one would welcome that. Or, better yet, just call up the rail fairy and have her wave her magic cleaning wand over our track. Just send her to me first. That would be a happy ending for sure.

Brick and Mortar Hobby Stores in Division 12

We have a dearth of train stores here in the division. A newer one has started up in Jamestown, NY. If you visit them, let them know you are a member of the NMRA and you learned about them from the Division 12 newsletter.

Terry's Train Shop

Terry's Train Shop is a train and hobby store located at:

1739 Foote Ave Ext.
Jamestown, NY 14701

716-397-5545

Operations Tip: Using Switch Lists in Car Forwarding

By Dave Ellis

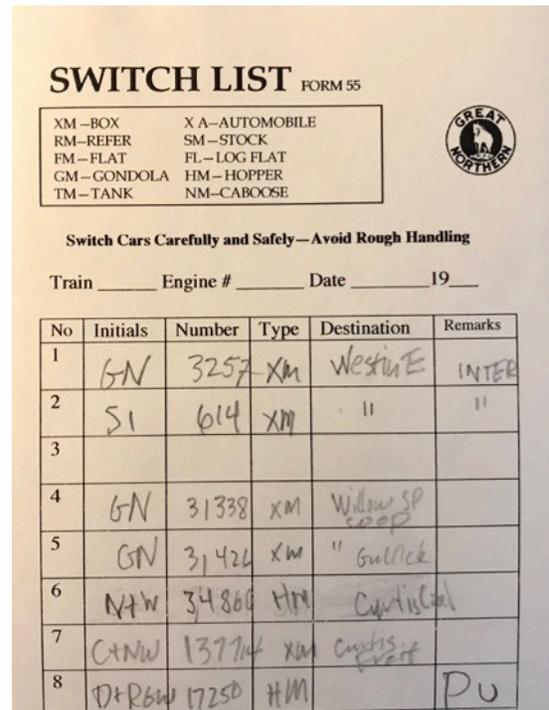
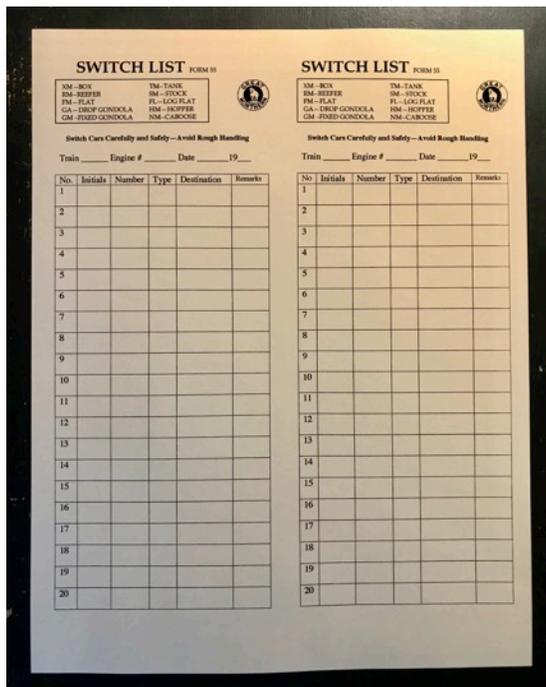
To start with a definition: switch lists are widely used railroad forms used to plan and record car movements. While used in a variety of different ways, all switch lists have spaces to identify cars and destinations -- the essence of car forwarding.

Prototype switch lists are nearly universal, used by railroads from their beginnings until the 1990s. Typically the form would be printed on card stock with one form using a half sheet vertically at 4.25 X 11 inches. By using a switch list, the conductor would have one sturdy and convenient sheet to work from, leaving the waybills and

other paperwork in the caboose. Examples of switch lists can be found online, such as this Great Northern prototype [Form 55](#), found at the [gn-npjointarchive.org](#), which is incidentally, a great resource for researching all things Great Northern or Northern Pacific. Examples of prototype switch lists can also be found at railrodiana sources: train shows, swap meets, specialty bookstores, or eBay.

the copy center and had it copied onto "buff" card stock.

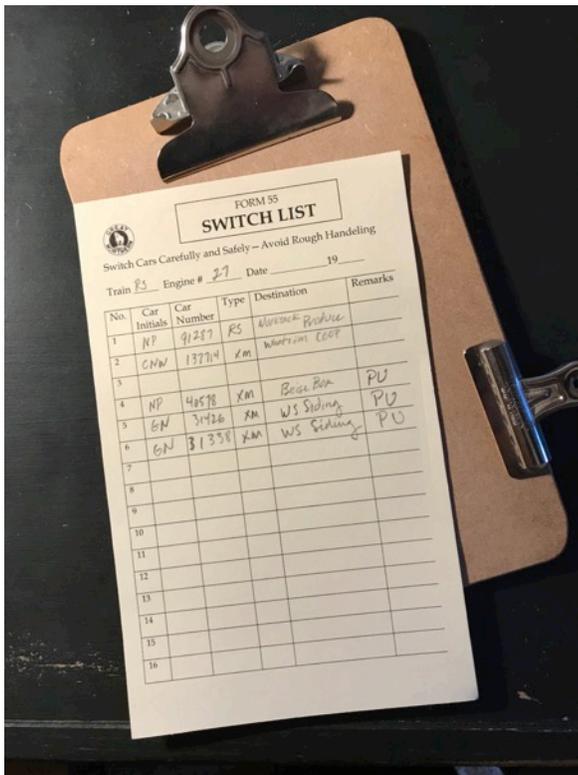
Just as switch lists were used prototypically in a variety of ways, they can be used in different ways by model railroaders.



To create switch lists, one can just photocopy blank ones, either prototype ones or a generic one such as the one available to subscribers on the Model Railroader web site (How To>Track Planning & Operation> Operating paperwork for David Popp's New York, New Haven & Hartford layout). I found that it was relatively easy to create my own authentic looking switch list by utilizing Word features such as tables and text boxes. I included a simplified list of AAR car types on the form. When I was satisfied with my version, I took it to

As a member of a modular group in Seattle, my first experiences in operations were with switch lists. During "slow" periods when our layout was on display, I would identify switchable "industries" from the group of modules at that show and add rolling stock to spurs to be picked up. Then, I would list appropriate cars for the industries in the order of the destinations on my switch list. I would also include the pick-ups in the list or as a separate list at the bottom of the form. Then I would make up the train in the yard and run it based on the switch list's list of cars to set out and pick up at the various industry locations. While having trains continuously running around our layout for display was our main goal, I really

enjoyed sneaking in some operations during "down time" such as in the late afternoons.

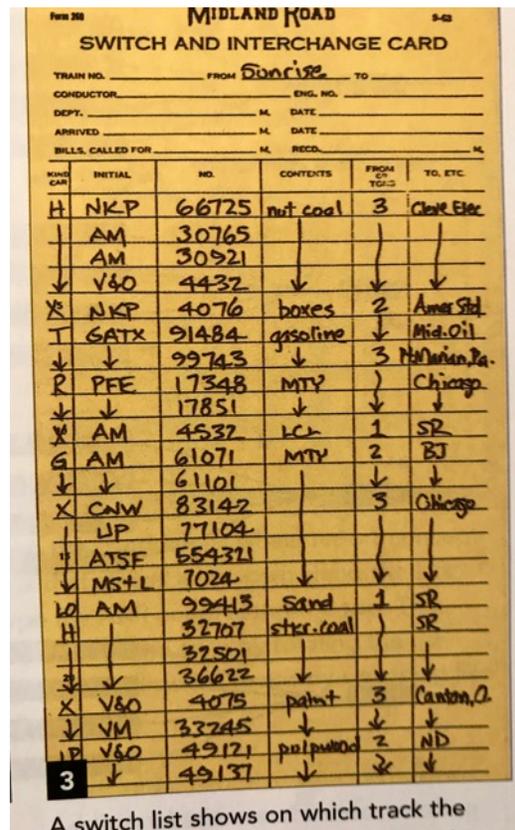


Now, with my GN branch line railroad in the attic using sequence operations, I am still using switch lists. While car cards determine the destinations of my rolling stock, I find that switch lists are helpful in planning the action. As seen in the photo, I am using a slightly smaller version of my switch list (two-up horizontally) and mini clipboards to hold the paperwork. One example of the use of switch lists in my current plan is at the following point in the sequence:

Step 5: Road Switcher sets out and picks up for Box Spur, Elevator Spur and Team Track; returns to yard with Pick-Ups from Greenrock Turn.

I list the set-outs and the pick-ups on the switch list, planning the action: in this case, two cars to set out and three to pick up. My car forwarding system, using both car cards/way bills and switch lists, was somewhat inspired by David Popp's videos on MRVP. Here is one with an overview of the process (including an introduction to the use of switch lists) that can be viewed for free without subscribing: [Switching the Southbound](#).

Another way that model railroaders can use a switch list is to aid in yard sorting.



A switch list shows on which track the

As I don't have a substantial yard on my railroad (yet!), I am using an example from Tony Koester's Kalmbach book: *Realistic Model Railroad Operations-Second Edition* to demonstrate this usage. His process is to first list the cars in

the order that they arrived in the yard on the switch list. Then, as yardmaster, one designates yard tracks for different destinations (and trains) and notates on the switch list (based on information from waybills). In his example, track #1 is "propers" (to be delivered in town). Track #2 is "shorts" (to be delivered within the division). Track #3 is "throughs" (cars going beyond the division). Then, using the switch list, the cars are blocked into trains, ready to be sorted into station order.

Both prototype and model railroad switch lists are versatile and useful forms that can be an essential part of car forwarding. Switch lists provide a simple introduction to car forwarding for a beginner in the operations "game." Even for an "old head," switch lists can be powerful tools.

Mentoring in Division 12

At a membership meeting last fall, we discussed several approaches to offering mentoring in the division. Ultimately, we decided the best approach was to keep it simple, or at least, informal. We came up with starting a list of members who felt comfortable mentoring on specific topics. To contact the mentors, either email the clerk (clerk@div12mcr.org), who will forward your email, or contact them directly.

- Brad White: DCC, Signaling
- Dave Ellis: Backdrops
- Ed Blenner: Scenery
- Doug Sandmeyer: Benchwork, Wiring, Soldering

To publish the *Builder's Plate* every month (our goal) we need submissions!

Modeler's tips, modeler's projects, the new Modeler's Workbench column, or any other railroad or modeling related stories make excellent submissions. Any member can submit a short article.

To make our membership meetings less business-focused and include more model railroading fun, we also need reports from the officers and committee chairs submitted to the *Builder's Plate*.

Write it up and submit it as a minimally formatted Word document attached to an email to clerk@div12mcr.org. Photos accompanying the article can be a separate attachment formatted as JPEGs.

Committee Chairs and Volunteer Positions:

Achievement Program: Mike Hauk
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Newsletter: Dave Ellis
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A New Monthly Column: The Modeler's Workbench This month by: Bill Schopf

This is the first in a monthly series that features three tools or products that Division 12 members find indispensable on their workbench — things that their modeling efforts would be crippled without. The following three are my choices. Think about what your favorite tools or products are and submit them to the newsletter. We would all like to read about them.

#1: Pan Pastels ... I discovered these after Tony Koester featured an article on them in *Model Railroader* several years ago. The article, titled something like "Weathering a Locomotive in 7 Minutes," intrigued me and I purchased some.



Pan Pastels are a very soft and pliable pastel chalk product packed in "pans" or small round plastic containers. Color selection is excellent. They are erasable — that is if you don't like the effect simply remove with a damp sponge and start over. They create what the company calls painterly effects in that different colors can be blended together. Applied with small sponges and mini applicators the company

calls Softt Art, they are a breeze to work with. They stick to the surfaces unlike many chalks that just fall off the surface when applied.

Made for painters and artists, they are perfect for us as modelers. Personally, I don't know how I would weather anything without them. They do a great job and are quick. I can weather a boxcar acceptably (at least to my eye) in two or three minutes. I haven't gotten up the nerve yet to do a locomotive, but I'll re-read the Koester article two or three times and do a Reading GP-7 one of these days. A building roof can be weathered nicely in less than a minute with superb streaking effects.

They can be applied using the company applicators (more expensive) or simply going to a cosmetic store or a dollar store and buying makeup sponges and mini applicators. Paintbrushes do not work well with them. And to seal them, do what you have to do with all chalks. Hit them with just a whisk of Dullcote. Just a quick whisk. No more. Don't flood your surface or the effect you produced will vanish. You'll soon find out how much is a whisk and be accomplished with them. For buildings that won't be handled, I don't bother with Dullcote. But with rolling stock that is handled a lot, the chalks should be sealed.

A search on the internet will turn up the best prices and let you see the sets or single colors you want.

Website: www.panpastel.com (Note: The company website provides a list of major retailers who carry their products. The best prices will come from this list.)

#2: Kester Liquid Soldering Flux Pen ... Unquestionably, my biggest pit-hole as a modeler is my soldering. I am — by any standards — terrible. My solder joints on a good day are globs. I hate soldering and put the job off as long as possible.



A couple of months ago I visited Dale Desser in his train workshop. We were talking about soldering and he showed me his Kester liquid flux pen. It is so simple to use. You shake it vigorously for 30 seconds and then push the felt flux chiseled end in and out until it is saturated with the liquid flux. Press the flux pen on the joint you want to solder, push it in and out, tin the iron and apply the solder. He gave me a pen to take home and try. Wow, was I impressed with the results when I pulled out my Weller iron and used it.

Presto. I had with only a couple of quick practice joints, really nice soldering jobs. At least to my eye they were nice. Compared to the solder joints I have produced using Radio Shack soldering paste flux, these were beautiful. Minimal solder. Firm connections. Who could ask for more?

I purchased a couple of them at CML in Lexington, KY for about \$7 each with free shipping. Website: www.CMLsupply.com. Their price was good, I thought, and their customer service superb when I phoned them. For more information, the Kester website is www.kester.com

#3: Testors Createx Enamel Paint Markers ... I have Code 100 rail on my layout and the rail height becomes very noticeable when photographed. Wow, does it become noticeable. It is worsened by the shiny silver

appearance of the Atlas nickel silver track I use.

I've tried painting the rail with several methods. I tried Woodland Scenic paint pens and was disappointed. I used a product that originated out of Erie (I think it is called Bill's rail paint or something similar) and was again disappointed. It applied unevenly and thin and did not look good at all. Painting with a small brush was time consuming and the prospect of painting 120 feet or more of mainline plus a couple hundred more feet of sidings with a tiny brush was not appealing.



Then a year ago at Hobby Lobby I bought a package of the Testors Createx enamel markers for \$10 (minus \$4 with my trusty coupon). I was delighted. They work beautifully. They cover effectively. They apply easily. And they make the rail look significantly better.

The three-pack consists of three weathering colors — Rail Brown, Rail Tie Brown and Rust. The paint pens work on much the same principle as the Kester Soldering Flux pen described above. Shake the pen vigorously for 30 or so seconds, rapidly push the chiseled painting tip in and out until it

becomes saturated with paint, and then run the tip down the sides of your rails.

Hobby Lobby no longer carries the product, not even online. I googled the product (exact product number is Testors 73801) and found an interesting slot car store in Michigan (www.professormotor.com) that had them on sale for \$4.50. Whether that price holds, I can't say. But numerous sites carry the product.

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.

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 an [FAQ](#) with instructions for how to register at the NMRA website.