



Photo by David Heinsohn

THE BRASS POUNDER



Official Publication of the
Kansas Central Division
Mid-Continent Region of the National Model Railroad Association

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Notice

The October KCD meeting
will be at Chris and David
Heinsohn's on October 1,
2016

Join the KCD on Facebook!

Kansas Central Division-NMRA has a Facebook page and is for NMRA members only. It is a place to share model railroading adventures, post pictures, tell tales of woe in building your empire, post obstacles you have overcome, and ask questions. Have fun. Simply enter Kansas Central Division - NMRA in the Facebook search block and select request to join. See you there.

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Join the KCD Yahoo Group!

Kansas Central Division has a Yahoo Group. To join the KCD Yahoo Group, send an email to KCD-NMRA-subscribe@yahoogroups.com. You will be automatically subscribed to the group with the email address from which you sent the message. Or, go to groups.yahoo.com and enter KCD-NMRA in the search window to find the group and to join

<i>Call Board</i>	Director David Heinsohn Kd0r@fhrd.net	Superintendent John Snell jsnell@cox.net	Clerk Tom Katafiasz	Paymaster Larry Tiffany

Minutes of Last Meeting

The KCD meeting of Saturday, August 6, 2016 was held in Topeka at the home of Larry Tiffany. Those in attendance were Pat Boltz, Ray Brady, David and Chris Heinsohn, Daryl Klataske, Tom Katafiasz, Larry Tiffany and guest Jim Goodell.

The meeting was convened at 1:05pm by Director David Heinsohn. Paymaster Larry Tiffany reported that we had \$81 in the treasury.

Wayne has submitted his resignation as the editor of the Brass Pounder and Ray Brady has agreed to do the position. There was discussion held as to how we could increase participation in the meetings. Possible interviews with members, together with pictures, etc. were possible ways to increase interest in the KCD.

David brought news from the NMRA Regional Directors meeting that the Topeka Chamber of Commerce has requested that a Regional Convention be held in Topeka. Of course, that means the KCD will host the convention. We discussed the effort involved to make a convention happen in 2019. All felt that it was something we would do, but that we needed full participation from the NMRA membership - more than was at the meeting. We felt there was still time before a decision needs to be made to proceed. All members are to think about doing it and whether they would participate in the organization of the event.

The meeting was adjourned at 1:42pm.

The members present then operated on Larry's Union Pacific model railroad which has been converted to DCC operation. All of the members enjoyed operating on the newly converted DCC model railroad.

Next meeting October 1 at David and Chris Heinsohn's.

Respectfully submitted: Tom Katafiasz, Clerk, KCD



KCD Attendees August 2016

Photo by Tom Katafiasz

Agenda for October 1, 2016 Meeting

Kansas Central Division - **NMRA**

October Meeting

Saturday, October 1, 2016

1:00-3:00 PM

At Chris and David Heinsohn's

Short Business Meeting

followed by

NMRA EduTrain Seminar

Basic Model Railroad Operations

By Dick Roberts

Break

Putting Operations Seminar into Practice

**Hands-On Operating Session with
"TimeNook" * Switching Layout Using
Car Cards and Waybills**

* Switching Layout discussed and photographed in the interview with David found elsewhere in this issue of **THE BRASS POUNDER**.



UP2002 in Salina August 19, 2016

Photo by Tom Katafiasz

Superintendent News

From the **KCDivision NMRA**

Greetings to you all! It has been a long time since I have written anything for the Brass Pounder. Better late than never, I guess. First, I want to thank Wayne Castegnaro for his fine tenure as the BP editor. I am sure that it takes a lot of time to put this together and we all appreciate his work. Good job, Wayne!

Second, I would like to welcome our new BP editor, Ray Brady. Ray was kind enough, and brave enough, to take up the mantle. I am looking forward to what Ray does with this publication. Of course, Ray needs our help. Articles are needed! So, if you have something on your mind, or if you just had some success with a modeling technique, then by all means share it with us! It doesn't need to be long or wordy. Just share. After all, that is what the NMRA is all about. Pictures are also a good idea. Seen something odd or unusual lately? Take a picture and submit it to Ray. You get the idea. Share.

Ray has done a little research and has discovered that only a small percentage of our Kansas Central Division shows up to our

meetings. This is discouraging. Not that I don't like seeing the same people each time but I think it would be exciting to see some of you that have never attended a meeting. You have missed some great layouts and opportunities.

In October, we will meet at David and Chris Heinsohn's home. I am very excited to see what David has done in N-scale. I also think he dabbles in garden railways, too.

I want to especially invite you to our December meeting in McPherson. We will meet at the McPherson Museum layout and then move to the home of Tom Frankenfield and tour his Lehigh Valley HO layout. Tom has chosen to decorate his pike in the fall season and the colors are stunning! Not something you see very often on model train layouts. You'll also see that Tom is a terrific scratch builder of structures.

I hope to see more of you soon. Thanks for reading.

John



Director News

From the [NationalMRA](#)

Wow! This was certainly a busy summer for Model Railroad convention and other activities around here. I hope you had lots of chances to attend the conventions of your choice. It's not too early to start planning for next summer! The national convention will be in Orlando, so it might be a good time to take the kids and/or grandkids on a family vacation.

Our October meeting will be here at our house. The focus will be on model railroad operations. There are more details elsewhere in this Brass Pounder.

Speaking of the Brass Pounder, this is the first issue for our new editorial team of Ray and Chris. Ray's been hard at work figuring out what we really need from our newsletter, and how to make it look even better. Chris will be helping Ray out with some of those nitty-gritty proof reading details. Be sure to thank them for their work. Let them know what you like, what you don't like, and what other stuff you'd like to see in the BP. Again, many thanks go to Wayne for his years of hard work as our editor. If you have articles or pictures of models or prototype scenes please send them to Ray for inclusion.

Since we don't have to meet print standards for our newsletter, you can send that shot you grabbed with your phone as well as the really high resolution stuff you take with your studio camera. What? You don't have a studio camera? Neither to do I, so send Ray what you do have.

Just before I sat down to write this I got word about an operations event in the St Louis area. By the time you have this in your hands the invitation window will be closed. That reminds me that we do have a couple of timely ways to share news and personal stories. The older one is our Yahoo Group, KCD-NMRA. This is a classic email list in the Yahoo Groups format. In addition to exchanging emails you'll find copies of the current and back issues of the Brass Pounder, and pictures that members have chosen to share. I passed on the announcement of the St Louis event to that list as soon as I read it. The other option is our Facebook group, Kansas Central Division. Like all Facebook groups this is really good for sharing those quick pictures and comments about model railroad related stuff. I'll probably share the announcement about St Louis there as well. Both of these are intended for all members to

use and share on.

Well I'd better go pick some more apples then probably go run some trains on TimeNook. See you in October!

David



An Editors View



A VIEW LOOKING OUT

This is my first issue of being editor of **THE BRASS POUNDER**

First, let me express my thanks to Wayne for his great job in serving as editor of **THE BRASS POUNDER** over the past 4 years. Wayne, thank you for your contribution!!

As you can readily see, **THE BRASS POUNDER** has a distinctly different look to it. When David asked me to consider being the editor of **THE BRASS POUNDER**, I thought about it long and hard. My quandary was about what I could bring to the group and where the group might be going. So, let me share some thoughts with you.

My thought process went through the "What, Where, Why, and How" about **THE BRASS POUNDER** and the Kansas Central Division of the NMRA. My thoughts:

Where does the **TBP** fit into the mix? With the plethora of publications for model railroading on the street, and with two other NMRA publications already out there (Caboose Kibitzer and NMRA Magazine) what is the added value of the **TBP**? I submit that one of the goals of the **TBP** should be to highlight and celebrate what is happening within the Division.

Why do we send it out? I hope it is not to just publish for the sake of publishing. It should be something that tells what the KCD members are doing in the hobby of model railroading. We need to be celebrating each other, not just sending out minutes of meetings.

What do we put in the **TBP**? If we want to document the meetings, we can send out minutes by email – nothing elaborate. However, there are great things the KCD members are doing with model railroading. We can and should be celebrating the things that excite us.

How do we do this? To do this, we need to bring more information to the members about things our fellow members are doing. Which

means more members sharing information. Which hopefully means more members being involved.

With these questions running around in my mind, I felt that the news from the Division Director and Superintendent were still vital, but news from the members was equally important. So, I proposed to David that there be other features in the **TBP**.

First: I have not met 75% you – I do not know what your interests are or what you are doing. So, with the assistance of the KCD Director and Superintendent, we would like to find out more about what you are doing. The interview in this-months **TBP** is a sample of how we would like to "get-to-know-each-other."

Second, each of us has an interest in model railroading. We wouldn't be NMRA members if we weren't. And each of us has something that would be of interest to the group. Techniques, Layouts, History, Research. The list is endless – just look at the wide range of disciplines that the Achievement Awards cover. We can and should share with each other. The article in this issue about wiring turnouts for DCC is an example. We will look for more articles.

Third, there is a plethora of information that has already been published. Why reinvent the wheel? So, I will be pulling articles from previous NMRA publications that will still have relevance to the modeling community today. The article about "cabeese" from the 1966 Caboose Kibitzer is an example of history that is still of interest.

So, I look forward to meeting more of you and finding out what is happening in the Division. We each have something special going on in our model-railroading world.

Ray Brady

KCD Associates in the NMR Association

Activities and Interests of the Division's Members

We are starting something new with this issue of **THE BRASS POUNDER**. As a way of introducing each of us to each other, the officers of KCD will be contacting each NMRA member to get to know them. In the process, we anticipate there will be a number of new and exciting things that the members are doing in the Model Railroad world that would be of interest to the membership as a whole. We hope to thereby enhance the communication within the group.

A Conversation with David Heinsohn

Brass Pounder: What got you started in model railroading?

David: Most model railroaders I have known have been into the hobby forever. Not so with me. When I was 11, my buddy across the street got a 3-rail Lionel Super Chief. So that next Christmas I HAD to have a model railroad. Instead of O scale like my buddy, I ended up with an HO freight train that ran on a loop with one siding - on a piece of plywood. This lasted for 6 months and then went away. I do not remember what happened to it, but it just disappeared. I have no idea where it went but I never missed it. I did not have a mentor to keep me going, and I had no idea what a siding was for.

Then from 1961 to 2011, I had no model railroad involvement. But, being a ham radio operator, one of my daily contacts was a WATCO engineer in Wichita. Having been a Navy tugboat engineer, as we talked over the air I found his stories very interesting.

There were other things too, like riding the trains in England and Europe, riding on boats on the British canals that had railroads beside the canals (parallel engineering), and having a friend that was interested in depots all over the world. But more importantly was that my dad talked about taking the Doodlebug from Newton to Elmdale when he was a teen. And of course living outside Elmdale now and with US 50 paralleling the Santa Fe Transcon from Elmdale to Newton, I saw many trains in my commute to work in Wichita.

Then when I retired from Flight Safety International in 2011, Chris and I took the train from Kansas City to St. Louis and back as my "Retirement Party". That was the spark. Two weeks later, I came home from a trip to Wichita and told Chris I had spent \$250 on some N-Scale trains and track. That night, I put the track down on the floor, sat in the middle of the layout, and played just like a 10-year old. She still chuckles at that image.

BP: How did you get involved with the NMRA?

David: The \$250 purchase in 2011 led me to researching how to take my layout from concept to reality. My vision was to model the Santa Fe from Elmdale to Newton. So, the "analytical" in me said I needed information. First, I needed to know what the ATSF was all about over that distance. That led me to finding drawings that Steve and Cinthia Priest put up on the internet of actual Santa Fe drawings of the Santa Fe from Emporia to Newton.

Then, since the Santa Fe is double track, my first quandary was how far apart to space the tracks. Again, researching the web revealed that the NMRA had a standard for Track Centers (Standard S-8). That led me to join the NMRA, to meet the local Division members, and to get involved. So, within 1.5 years of the rekindled interest in model railroading, I had gotten active in the KCD to the point of volunteering to be Director for the Division.

BP: And, we thank you for your contribution over the last 3-4 years.
What caused you to choose n-scale?

David: It was just by accident. When I made my initial \$250 purchase, I was talking to Shawn at Hobbytown in Wichita and he suggested n-Scale. I just liked the size. For what I wanted to do, it seemed to fit what I was conceptualizing. It was nothing calculated.

But, I also have plans for an outdoor garden railroad in G-scale. And, planning for the future, it also will be ADA accessible with the track plan at eye level and walkways to follow it around. I have some of the rolling stock already.



G-Scale ready to go outside

BP: **What is your favorite aspect of the hobby?**

David My favorite aspect is operations. That is why I have TimeNook (a switching layout track plan on a 12X80" half of a bi-fold door), and that is why I go to Augusta every month to the group down there. I used to go to Olathe every month for the sessions in the mall but the mall no longer exists. I went to an operating weekend in Tulsa, and I make sure I do OP sessions at regional and national conventions. I find it interesting and a mental challenge. I would not last long in the hobby just watching trains go in circle

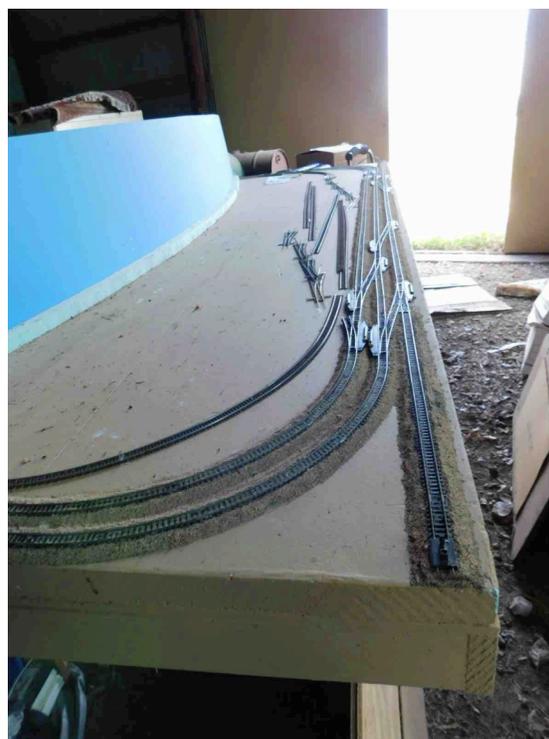


TimeNook switching layout looking from each end

BP: You have an oval right now that models Elmdale prototypically on one side of a backdrop and a freelanced Santa Fe on the other side. How did you develop the layout and where are you going with that?

David: I am using a computer program called *Anyrail*. It is free off the web. When I started using the program, it became clear that the freehand drawings I had made of the track plan on a sheet of paper was prone to making errors. In trying to make things fit, it was easy to put in radii that were much too small without knowing it. So, I used the computer to design my 4X8 layout and learned that the computer forces you to make realistic curves and turnout lengths.

And, it is allowing me to design my layout of Santa Fe from Emporia to Newton. It clearly lets me utilize my available space for my vision of an around-the-wall layout. I want to model the Santa Fe in the late 30's or early 40's at wheat harvest time. The early 40's is probably better since there is more ready to roll rolling stock available than the 30's vintage.



4X8 Oval Layout, Elmdale on left, Freelance yard on right

BP: What has your involvement been in the Achievement Awards?

David: So far, I have completed the Golden Spike, the Organization Official Award and the Author Award. Next up is to use-my 4X8 oval to do the Civil and Electrical achievement awards. I gave serious consideration to starting on the around the walls layout in what we call The Freight House, but from where I am on the 4X8 it will be pretty easy to earn Civil and Electrical Aps while I continue to design the bigger layout. The bench work is already done. Now to move it into the Freight House and get to work....

BP: What type of programs would you like to see in the KCDivision?

David: Of course we need a business meeting, but I also like the format of the Chisholm Trail Division meetings in Wichita. Their meetings are 2-hours long. After their brief business meeting, they usually have two presentations with a break in between. This could be anything from a "how-to" build something; to a slide show of area depots that still exist; to pictures or movies of a layout tour that a member participated in at a convention. It makes for an interesting variation into the many aspects of model railroading. This allows for learning as well as socialization with others about model railroading.

BP: Distance within the Division seems to be an issue with attendance. What are your thoughts about that?

David: That is clearly an issue. We are all spread out. And we do have pockets of modelers. We have a group of 6-8 NMRA members in the Topeka area, a similar number in the Emporia area, and 4-6 in the Salina area. The remainder are scattered around the Division area. That is quite a geographic area to sustain our membership. I have no problem with traveling, but I know others within the Division do. Council Grove or Harrington shows up as being the center and it would be equidistance for all of us. But, it still would be a hike. Yes, it is two lane roads but they are not bad. There are "Pros" and "Cons" of central vs. member's homes. Sometimes we need to operate model railroads too. Of course, it would depend on the program where we hold the meeting.

BP: What is it that we could do as a division that you would like?

David: I miss active work groups. I enjoy doing things with others and learning from others. Painting, buss wiring, track laying, etc. are just a couple of things we could do to help each other out. I know that Turkey Creek Division has a lot of operators that help each other.

BP: What about building a NMRA Division layout?

David: The Division is scattered, so that would be a challenge. I have thought about Strong City depot as a location. Perhaps we could take out a lease for an empty room in the facility. Maybe other options though, such as a modular layout that could travel, might be of interest to the group.

BP: At the last KCD meeting at Larry Tiffany's, we talked about KCD doing a convention in Topeka. Do we have the skills?

David: Yes we do have the skills, plus Topeka is a great area. We have the BNSF Car Shop, Great Overland Station, Baldwin Dinner Train, and the NMRA members on the Kansas side of the Turkey Creek Division are not that far away for tour locations. We could have some superb activities for a convention. And, your layout in Brookville could be used as an extra bonus activity when people are coming to and/or leaving the convention.

BP: David, thank you for your time. This has been great to get to know you better. We look forward to getting to know the other members as time goes on.

David: Thank you.

KCD Modeling in the NModelRA

Member's Modeling Activities

Turnout Modification and Wiring for My Layout

By Ray Brady

At our last KCD meeting, I was in conversation with one of our NMRA members and the subject came up of wiring turnouts. So, with some pictures and explanation, I'll tell you of my decision(s) for track and turnouts, how I modified the turnouts, and how I wired them into the layout. (I put the (s) on decision because any design is an evolutionary process; as newer information becomes available, you modify your direction.)

I. Track Selection:

The first decision was "What track do I want to use on the layout?" I chose Peco track and turnouts based on reading that Peco was the most robust of the available commercial choices. Further, I thought a combination Peco Code-80 on the main line and passing sidings and Code-55 on the secondary track would give the feel of lighter track on yards and industry switching as per the prototype railroads. But I realized that Code-80 on the mainline would be synonymous to 255-pound rail – much heavier than any prototype railroad uses. So, I decided on Code-55 as the rail-of-choice for my layout.

Thus far, all my layout construction has been mainline track – the yards and industrial sidings are still "to-do's. But, I do not see using code 40 for the yards and industrial sidings to get the feel of lighter rail in the less heavily used areas. Code-55 is close enough!

Then, I turned to which turnout I wanted to use. In Code-55, Peco only offers live frogs (electrofrog) as opposed to insulated frogs (insulfrog). Thus, I only had the frog angle to decide. And Peco is unique in that they really do not use frog angle. They use different turnout lengths – short, medium, and long. These sort of represent #4, #6, and #8 frogs. Again, close enough! (Larger frog numbers would be nice for the passing sidings, but they are not available in Peco.)

As a footnote, I have tried the Code-80 insulfrog and have a few on my test track oval. But they are prone to shorting at the point of the frog when the locomotive rolls over it. And, the frogs are a black plastic material that is just not realistic even when weathered. So I will be replacing the insulfrog turnouts on the test oval sometime in the future. Also, in my first attempt at installing track, I used medium turnouts for the Topeka staging, and large turnouts for the mainline. But the medium turnouts have proven to be unreliable for backing long-wheelbase locomotives through the turnout (Big Boy's do "cry" on them....). So, at this point, Peco Code-55 large turnouts are the norm on my layout.

II. Turnout Modifications (See Figure 1)

Theory behind the Modifications

I wanted to make sure I had flawless electrical power to avoid interruptions to the locomotives (or other rolling stock). To do that, my criterion for the layout has been to assure that EVERY piece of rail has a feeder providing power to it – no reliance upon contact between the rail joiners to provide electrical continuity. Thus, I solder feeder wires to all rails, including the turnout stock rails so power is never a question (with 600' of main line track, and 75 turnouts so far, that is a lot of feeders).

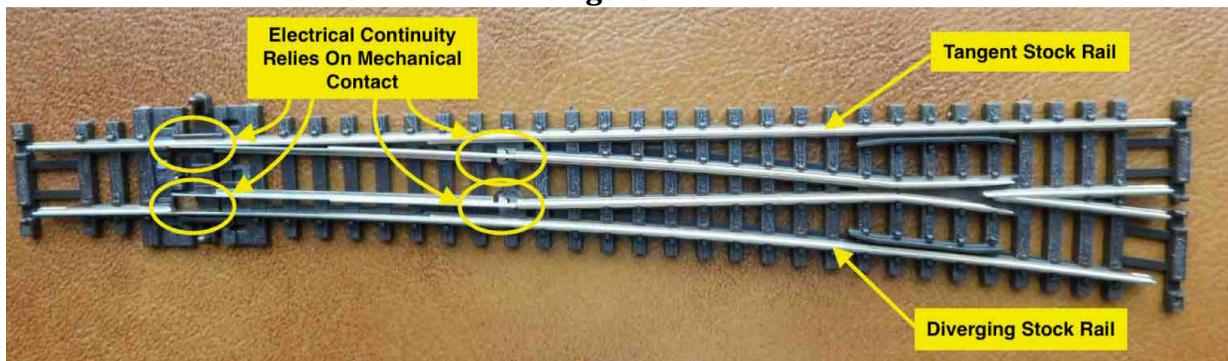
And, the frogs in the out-of-the box Peco turnout currently receive track power when one of the points contacts the stock rail. Further, the hinge on the frog end of the point rails carries the electrical continuity to the frog (see the locations indicated on Figure 1). These mechanical contact areas have

the potential for intermittent power to that short piece of rail should they become dirty. Thus, I add a soldered connecting wire between the stock rail and the point rail on all of my turnouts.

Stock Peco electrofrog turnouts have no provision for reversing the frog polarity other than the polarity reversal that occurs when the points are thrown. It also means that the frog must be insulated at the exit so that a short circuit does not occur with the downstream track when the points are aligned for tangent operation. Thus even when solving the continuity problem of the points receiving electrical continuity, I still needed to isolate the frog and provide a separate electrical feed to the frog so that it can have the polarity change that corresponds to the direction that the points are aligned.

The following picture (Figure 1) shows what I am talking about. The locations where the point rails make mechanical contact are indicated. Further, the non-stock rails that go to the frog would cause a short circuit at the frog exit when the points are lined for diverging operation unless there is a means to isolate the frog from the rest of the rails at the exit. Thus, the area of the frog must be separated from the other track and have wiring go to it to allow for polarity reversal.

Figure 1

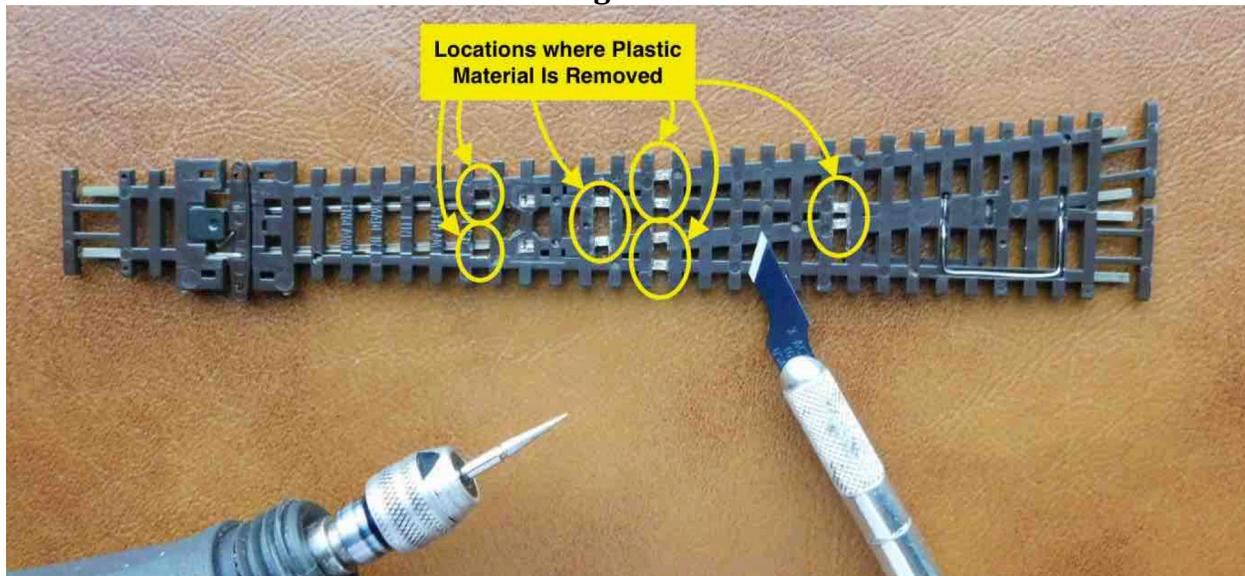


Preparation for Soldering (See Figure 2)

Some modelers solder feeder wires to the side of the rails, but I prefer to solder to the bottom of the rail so that the wire will be totally invisible when the ballast is installed. It also means that the wires can be attached before the turnout is installed on the layout.

The first step in the modification process is to remove the plastic tie material from the bottom of the turnout to allow the feeder wires to be soldered to the bottom of the rails. Figure 2 shows the locations where material is removed from the bottom of the track. The removal is at 10 places as shown. I use one of two techniques to remove the material. One method I use is a #17 Exacto blade to simply carve away the material. I use the #17 because the blade has a better angle to remove material between the ties, and is less prone than the common #11 blade to carve up fingers too (ask me how I know). The other method is to use a small Dremel diamond burr to grind away the bulk of the material followed by cleaning up the area with the #17 blade. This last method is the quickest, but also leaves a finer residue for clean-up. Both tools are shown on the photo below.

Figure 2



Tinning the areas to be soldered (See Figure 3)

As is true with all the things I am going over in this article, the whole process is about TECHNIQUE, TECHNIQUE, and TECHNIQUE. Soldering is no exception. The key to getting a good solder joint is surface preparation, temperature the joint is heated to, and the method for holding the material to be joined. My experience is

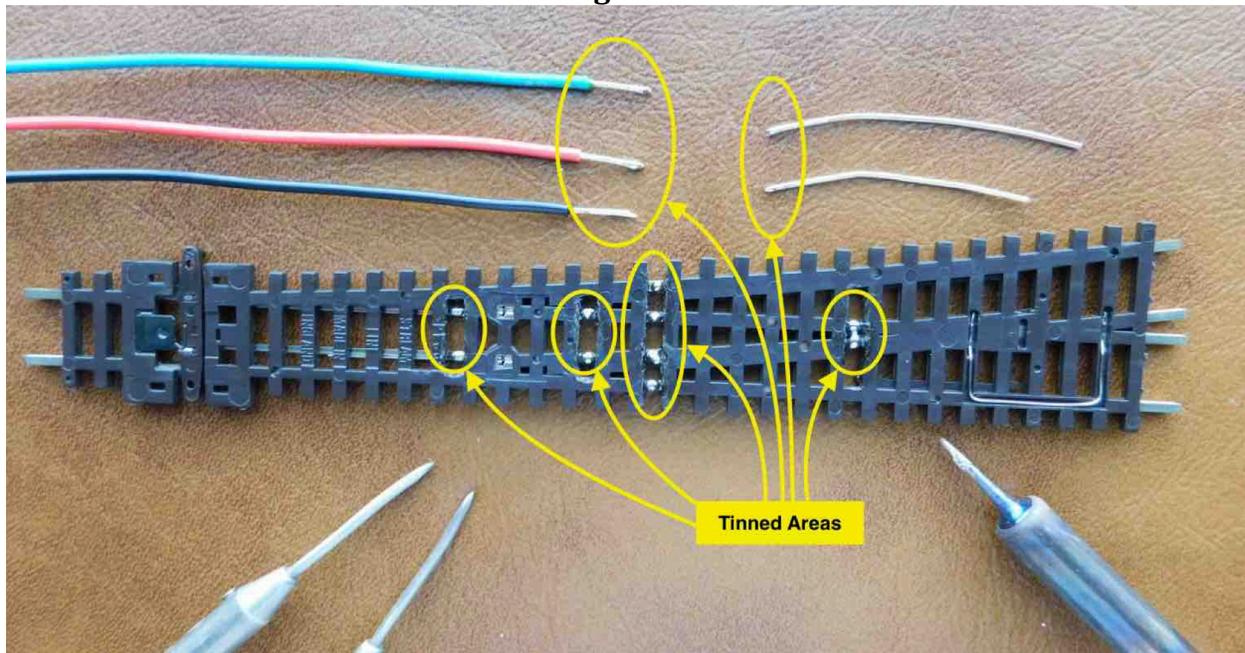
- a. Make sure the surface is clean.
- b. Use rosin flux on both sides of the joint.
- c. Use a small diameter rosin-core solder.
- d. Tin the joint before soldering the joint.
- e. Hold the turnout securely.

Then, the joining can begin. I use two techniques – resistance soldering and a soldering iron. With resistance soldering, cleanliness of the electrodes is of paramount importance. If the electrodes are dirty, the current cannot flow from the electrodes to the material – hence the electrodes will heat, not the joint you want to solder. That leads to excessive heat and melted ties. Aughh!! Not good

When using a soldering iron, the most important thing is to use a tip compatible with the size of the solder joint. Soldering wires to rail in n-Scale means a very small soldering iron tip.

The iron and/or resistance electrodes I used are shown on Figure 3. Also shown are the 5 wires that I solder to the turnout. The colored wires are 20-gauge and are 12” long. Since I am using 2” rigid foam for sub-roadbed mounted on a shelf .5”-1.25” thick, I used the 12” feeders to assure enough wire exits underneath the layout to allow flexibility for connecting to the track buss. And, I hold the turnout securely to the bench so it does not move. Because of the tiny nature of n-Scale, any movement will cause hot soldering irons to go where you do not want them. Again: TECHNIQUE!

Figure 3

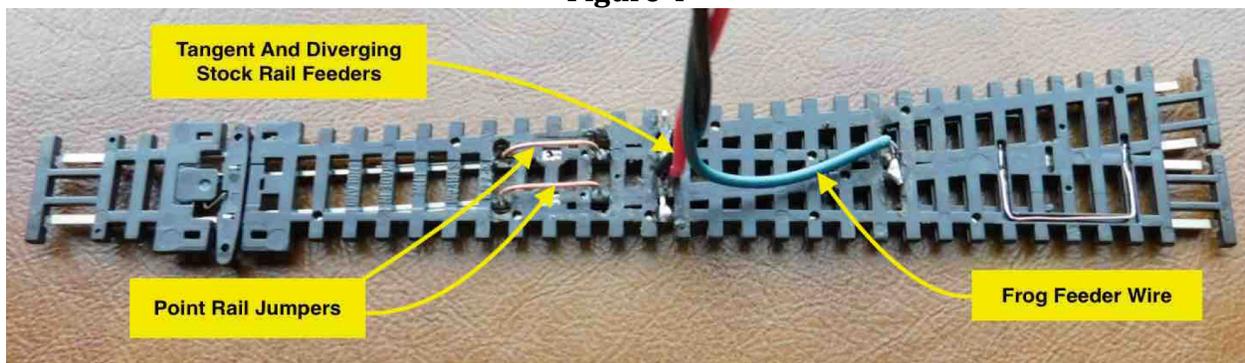


Soldering (See Figure 4)

After soldering the wires, Figure 4 shows what the finished turnout looks like ready to install on the layout. Clearance is needed in the roadbed to clear the green wire and the two bare wires so that the turnout can sit tight to the roadbed and the points can be moved unimpeded.

For my layout, the black wire is always soldered to the tangent stock rail, the red wire is always soldered to the diverging stock rail, and the green wire is always soldered to the frog. All that remains to be done now is make a cut to isolate the frog tracks from the remainder of the turnout.

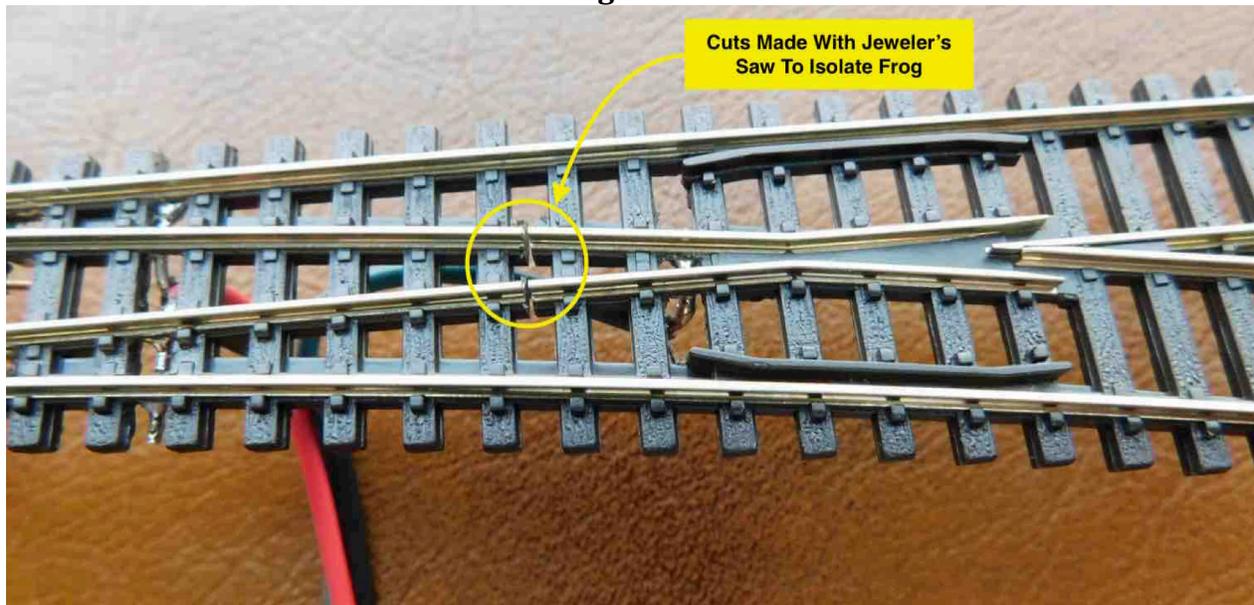
Figure 4



Isolating the frog (See Figure 5)

Cutting the rail at the locations marked isolates the frog from the stock rails and allows for polarity reversal corresponding to how the turnout points are aligned. I use Frog Juicers by Tam Valley to make that polarity reversal, but other polarity reversing devices can be used, such as single pole-double throw switches, tortoise machines with built-in switching, or other devices. I also put insulated joiners on all 6 rails of the turnout. This assures an isolated frog, as well as allows for block detection in the future should I need it.

Figure 5



III. Wiring the Layout

On my layout, the mainline track is really one continuous loop – all 600' of it. My convention is that the wire nearest the front of the layout is the black wire, and the rear wire is the red wire (I only have to remember Red-Rear). And, before I connect the buss to the power supply, I always check for a short circuit each time I attach another wire or turnout to the buss. Thus, short circuits are avoided should I reverse solder the wires (Yep, that has happened too). However, depending upon the turnout location and orientation, the tangent stock rail may have to be joined to the rear (red) wire. I just have to be cognizant of the turnout orientation to get the connection correct. And, if I have miscalculated, the wires can always be reversed at the feeder-buss connection because I use blue wire nuts to connect the #14 buss wire with the #22 feeder wire.)

As for the turnout frog, the green wire it is attached to the center terminal of a Mono Frog Juicer (or appropriate terminals of the dual Frog Juicer or Hex Frog Juicer). Each leg of the track buss attaches to the outer terminals of the Mono Frog Juicer. That is all there is to it. The electronics of the Frog Juicer automatically takes care of the polarity reversing when needed. I currently use Caboose Industries ground throws for turnout alignment, but other methods could be used too.....

So, I hope this discussion gives you an understanding of the modifications to, and wiring of, the turnouts on my layout. This concept is applicable to any manufacturer's turnouts in any scale (N, HO, O, etc) when power is fed to the locomotives and rolling stock from the rails.

Happy Railroading

Ray

Historical News from the **NMRA**

A look back at the NMRA of yesteryear

The Standard Wood Caboose

By Lou Schmitz

Brass Pounder, Volume 36, No. 3

August 1986

The wood sheathed caboose has been on the rear and carried the markers of almost every main line freight train in America from the Civil War era until after World War II. Early models were little more than boxcars with windows, side doors, and appropriate sill steps. End doors and platforms were added for crew safety and starting in the 1880's, a cupola became a standard item for convenient train observation.

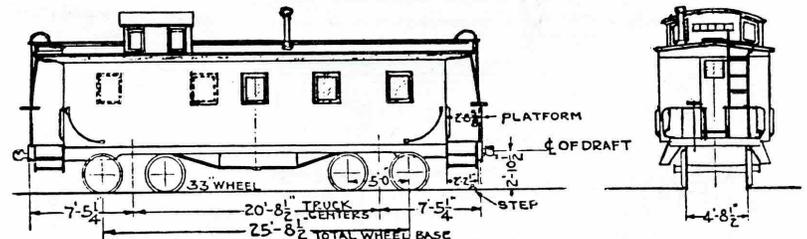
By the turn of the century, or shortly thereafter, almost every major railroad had developed a standard design that in most cases remained in use until the all steel cars took over in the 1949's and 1950's. Wood cars were being constructed to these individual designs on some roads well into the 1930's. In the case of the Union Pacific, the Harriman Common Standard of 1904 was used on both the Union Pacific and Southern

Pacific systems. There were later variations to these designs, such as a shorter class CA-1 car on the U.P. and subsequent NE series cars on the Burlington, but ownership was easily recognized by their use of the same general design features. The Chicago & North Western, and its Omaha Road subsidiary, used a

Chicago & North Western standard NE class caboose No. 12364 at Council Bluffs, Ia., in February 1959. Note the end cupola windows have been removed. Photo by Lou Schmitz.



CHICAGO & NORTH WESTERN RAILWAY
CLASS: NE
ROAD NO'S: C. & N. W. 10300-10348, 10400-10778,
11400-12198, 12300-12398,
12418-12488 (EVEN NO'S ONLY)
C. ST. P. M. & O. 6000 AND 6100 SERIES

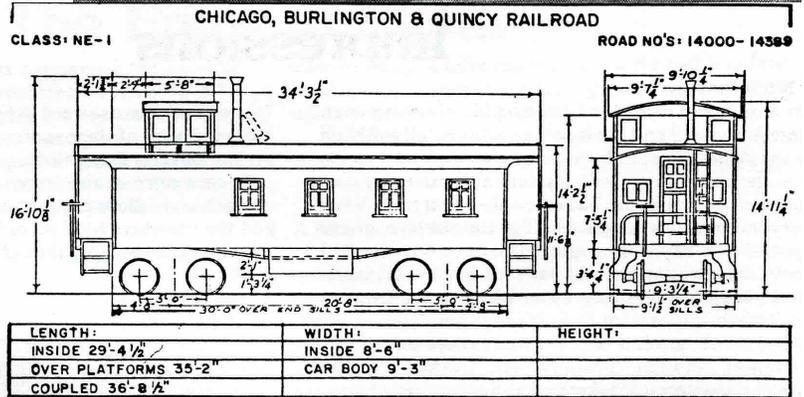


LENGTH:	WIDTH:	HEIGHT:
INSIDE 29'-4 $\frac{1}{2}$ "	INSIDE 8'-4 $\frac{1}{4}$ "	INSIDE 6'-10 $\frac{3}{8}$ "
OVER END SILLS 30'-0"	OVER SIDE SILLS 9'-0"	CAR FLOOR 4'-4 $\frac{3}{8}$ "
OVER STRIKERS 35'-7"	OVER EAVES 9'-5 $\frac{1}{4}$ "	EAVES 11'-1 $\frac{1}{8}$ "
COUPLED 37'-9"	OVER GRAB IRONS 9'-8"	TOP OF ROOF 11'-9 $\frac{1}{2}$ "
OVER RUNNING BOARDS 35'-9 $\frac{1}{4}$ "		TOP OF CUPOLA 14'-4 $\frac{1}{4}$ "

single design throughout this period with only minor changes in window arrangements and details. The earlier C. & N. W. cars were renumbered from the 1501-2223 and 4800-4998 series to the 11400-12488 series when they were equipped with steel underframes. Oddly, only even numbers were used on the C. & N. W., while every number in the C. St. P. M. & O. series was used, and were retained even after several were rebuilt to bay-window cars in later years. Prior to World War II, "boxcar red" seemed to be the predominant caboose color, although some roads, including the C. & N. W. preferred a brighter "caboose red." The multihued cabooses of today are a product of the post war diesel era.

Perhaps the most distinctive feature of the wood caboose was the cupola. The Harriman design of the C. P. and S. featured tapered sides with wood awnings over the side windows. The C. B. & Q. cars

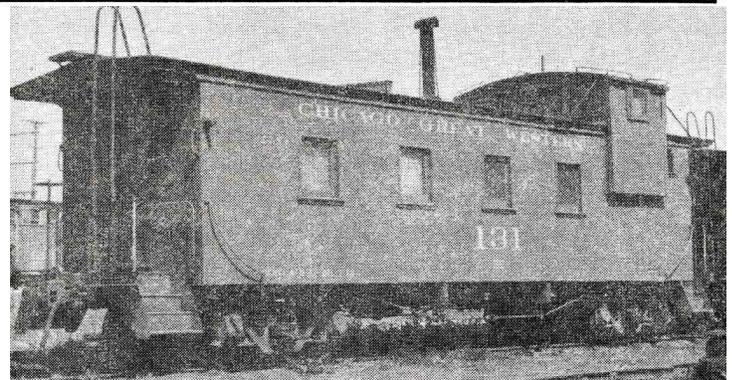
had taller more erect cupolas with narrow running boards under the side windows. The C. & N. W., which some credit with originating the cupola, had cars with relatively short, rectangular cupolas that probably led to their discontinued use in later years when the taller, hi-cube cars became popular. The cupolas remained on these cars, but in most cases the windows were removed. Among the more



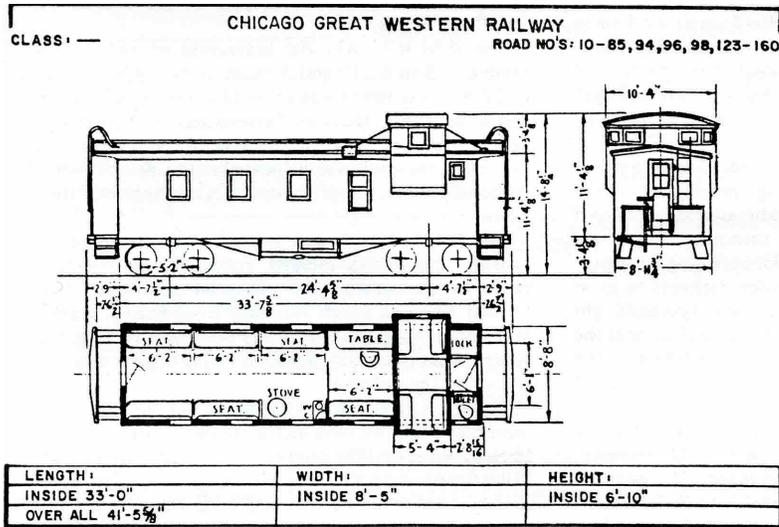
Chicago Burlington & Quincy class NE-8 caboose No. 13919 at Council Bluffs, Ia., in April 1962. Note the marker lamps in the rear. Photo by Lou Schmitz.

distinctive were the wide cupola used on the Chicago Great Western, which may have originated with the wide vision cupola feature on some steel cars of later years. These cars were rebuilt from boxcars around

the turn of the century, which probably accounts for the angular rather than rounder roofline. At first only the portion of the cupola above the roofline was wider than the car body, but later this was extended to include the full cupola seating area.



By rulebook definition, a train is not a train without markers displayed on the rear. These were usually kerosene lamps lighted at night (see photo of the C. B. & Q. caboose) although some roads used flags for daytime operation. Until 1920 or so, a third marker was often used on top of the cupola roof. The lighted markers displayed red to the rear and either yellow or green to the front and rear. In addition to markers, both U. P. and C. & N. W. used lighted train indicators between the windows on the ends of the cupola as indicated on the diagrams. These displayed the train number for easy train identification from the rear, but were discontinued and removed in the mid-1930's.



Chicago Great Western cupola caboose No. 131 at Council Bluffs, Ia., about 1947. Photo by Carl Hehl.

These displayed the train number for easy train identification from the rear, but were discontinued and removed in the mid-1930's.

It is hoped this brief review of the "standard" wood caboose will be of interest to those modeling that era. The photos and accompanying diagrams of the referred-to cars may help those who model an independent line to develop a standard for their road.

Timetable

A Look Down the Line

Mark Your Calendars
December 3, 2016
1:00 PM



The December Meeting

Of the

Kansas Central Division – [NMRA](#)

Will Be Meet At
McPherson KS

Agenda:

View the McPherson Museum Layout

And

Adjourn to Tom Frankenfield's To View His Layout