

# THE BRASS POUNDER\*



Volume 29 Issue 4; August 2020

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Kansas Central  
Division

Mid-Continent  
Region

National Model  
Railroad Association



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## Timetable

The next meeting are  
scheduled for

**July 15, 2020**

**@7:00PM Turntable**

**and**

**August 1, 2020**

**@1:00PM via ZOOM.**

**(See page 3 for details)**

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### 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 "KCD" in the Facebook search block and select "request to join". See you there.

### Join the KCD Yahoo Group

Kansas Central Division has a Yahoo Group. To join the Group, send an email to:

[KCD-NMRA=subscribe@yahoogroups.com](mailto: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](http://groups.yahoo.com) and enter KCD-NMRA in the search window to find the group and join.

# Superintendent News

By Ross Boelling

Greetings from Kansas Central Division!! It appears Summer is upon us. Granted, it is a Pandemic Summer, but for me that means another Fall is not too far away. Unfortunately, it will undoubtedly be a Pandemic Fall.

No matter your opinion of the Pandemic, I can tell you that if you are 65+, you do not want to get this bug in Kansas! I have been closely tracking Kansas COVID-19 cases since mid-May. The data is crystal clear: if you are 65+ and you get COVID-19 in Kansas, you have about a 1 in 3 chance of being admitted to the Hospital. If you go to the hospital, you have a 4.5 in 10 chance of dying. So far 78% of Kansas' deaths are folks aged 65+. Seniors 65+ are only about 10.5% of the total Kansas cases, so us old folks are doing a rather good job of avoiding the bug. **PLEASE** do what you can to keep from getting it! Masks in public, social distancing, and staying home seem to make a difference.

One thing you can do to avoid the bug is work on your model empire! Another is to take advantage of the many video opportunities available to visit and learn from the comfort of your home. The NMRA has developed several virtual events and are planning a virtual conference. YouTube has a plethora of Model and Prototype videos to choose from. Most all hobby stores will be happy to mail your needed treasures to you. I am sure all of our normal hobby suppliers have taken a big hit from COVID-19 with the loss of train shows and store traffic. We each need to help keep them around!!

We had a successful test and actual meeting in June. ZOOM seemed to work very well for us. During our meeting we discussed methods to ease the isolation of COVID-19 and increase membership participation.

We have decided to hold an informal ZOOM meeting during the odd months called "Kansas Central Division Turntable". It will be a no-agenda discussion session of Model Railroad topics, questions and answers, layout updates, etc.

Our first one is **Wednesday, July 15<sup>th</sup> at 7PM**, so depending on when you read this, it is either upcoming or it was a smashing success. You should have received an email from me with the link to the video conference. Member Greg Schneider was gracious enough to provide the ZOOM link for us. I hope this will become a popular ongoing event for us.

Another great opportunity is on Sunday, July 19<sup>th</sup> at noon. We have been invited to participate in a multi-Division virtual meeting and two mini-clinics. This allows us an opportunity to participate along with four other NMRA Divisions from Georgia, Arkansas, Western Kansas, and the Pacific Northwest. **This is an RSVP event. I sent an email to our members; you will need to respond to that email to receive the email with the actual private link to the meeting.** Again, depending on when you read this, it is upcoming or was a fantastic event.

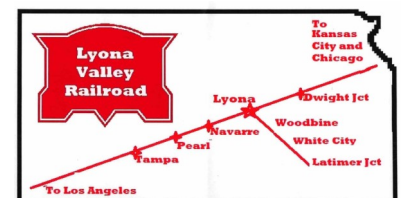
Our August meeting will again be a ZOOM meeting. **You will receive an email with the link for the August meeting.** At the June meeting we agreed to decide from meeting to meeting whether it will be in person or via ZOOM. Based on recent Kansas COVID-19 numbers, I expect we will be holding quite a few future meetings over the internet.

A quick shout out to our Director and Brass Pounder/Caboose Kibitzer editor in chief Ray Brady. He does a fantastic job keeping us informed in our Division and Region of what is what. I know it takes a LOT of time to get this all done. Thank you, Ray!!

I hope to "see" you all soon at one of our virtual events. Feel free to email or call me if you have any questions or comments.

Thanks for belonging to NMRA and Kansas Central Division.

*Ross Boelling,  
Superintendent  
Kansas Central  
Division, NMRA*



# Minutes of the Last KCD Meeting

June 6, 2020

The June 6, 2020 meeting of the KCD was a virtual “Zoom” meeting due to Covid-19 limitations. The meeting was called to order at 1:06pm by Superintendent Boelling. Those present at the Zoom meeting introduced themselves and mentioned their modeling interests. Those in attendance were Ross Boelling, Larry Tiffany, Ray Brady, Roger Larmer, David and Chris Heinsohn, Alan Meinholdt, Greg Schneider (relative new member who is a Professor of History at Emporia State University) and Tom Katafiasz.

Larry reported that the balance in the treasury is \$163.00. Chris moved and Larry seconded to approve the minutes from the last meeting.

Ross mentioned that Herington Railroad Days will be on April 30 and May 1 and 2, 2021 at the community center. Ross reported that the show has received \$2500 from the Herington Convention and Visitors Bureau and \$700 from Dickinson County Development as “seed” money for the show. The show could potentially generate \$1000 for the KCD. Chris moved and David seconded for the KCD to sponsor the Herington Railroad Days show. Advertising in local hobby shops was discussed and the store in Junction City was mentioned as a possibility. Alan mentioned that he could maybe assist with the printing for the show.

The next KCD meeting will be on August 1 and it will be a “Zoom” meeting. Greg mentioned that it may be possible to use his Zoom account from Emporia State. The October meeting will be at Ray’s, Covid-19 permitting! David moved to close the meeting at 1:45pm and Tom seconded. Ross suggested having an informal “turntable” Zoom meeting on July 15 at 7pm. Purpose to discuss modeling in general and anything else we want to bring up.

Ross discussed his experiences with the “drawbridge” on his layout and Alan and Greg said they had both viewed a few of the NMRA virtual conventions. We also discussed Chris and David’s experiences with river drawbridges on their East Coast travels. Alan mentioned that perhaps David could write an article on drawbridges drawing from his cruising perusing.

*Respectfully submitted, Tom Katafiasz, Clerk, KCD*

## Next Meetings—ZOOM

July 15, 2020 @ 7PM and August 1, 2020 at 1PM

Because of the Covid-19 virus, KCD will teleconference our next meetings are via



For those that have not used it, ZOOM uses the internet to allow us to see and talk to each other on a split screen. All that is needed is:

- A Mac or PC computer, or an iPhone or Android phone.
- The Zoom Application on your device. (<https://zoom.us/download> )
- A highspeed internet connection.

Once you download the ZOOM Application, you are good to go. Ross will be hosting the session and will be sending out the internet connection via email. He will provide the Attendees (all of you) with a meeting ID and a pass code. The second level of security will be as follows: once you enter the passcode and press “join meeting” you will be placed into the waiting room. When he sees you in the waiting room, he will authorize your request to join the meeting, thus weeding out any unauthorized guests.





# Modeling While Afloat—Part 2

By Christine Heinsohn

When I was writing my last article, David and I were in Jacksonville, Florida tied up in a Marina awaiting the last little bit of work to be completed on our boat. On May 1, 2020, we got underway for Portsmouth, VA. That trip took us 14 days. It was a pleasant trip; we learned a lot about anchoring as well as operating our boat with only the small generator.

When we got to Portsmouth, we spent some time with our daughter, arranged for some maintenance, and waited for maintenance to take place. During the waiting I have done a lot of painting watercolor and acrylic. We decided to arrange to have some of the maintenance done while we were away from our boat, Mollie, and drove to Kansas to pick up a 14-year-old friend to join us on Mollie for a couple of weeks. When we returned to Mollie, the maintenance still was not completed as the repairman had broken two teeth when he was eating lunch aboard Mollie just before he was to begin his service of her. He left when his dentist called him back and said the teeth could be fixed that day. So, we are still waiting the maintenance.

I pulled out my bag of building parts and continued the assembly of my tower. The first step of assembly is to put the window glazing into the body of the building. Each window cluster must be cut out of the master sheet with an X-acto knife. Then the glue is placed carefully around the outlined windows and the glazing is adhered to the building parts.

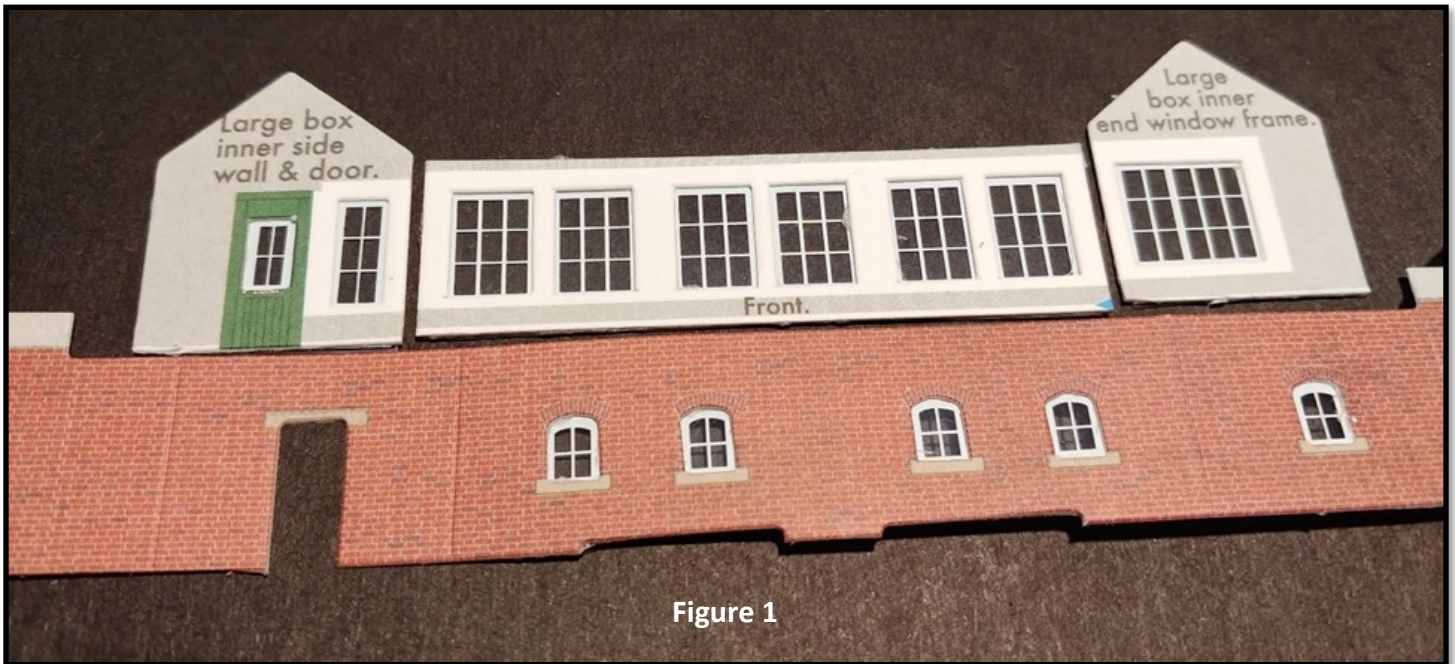


Figure 1

**Figure 1** shows the upper and lower sections with installed glazing. If you look closely you will see little gobs of glue in a few places. I was able to remove them with tweezers when they dried. And, the alignment was a little off on the brick wall. I am learning how fast the glue sets.



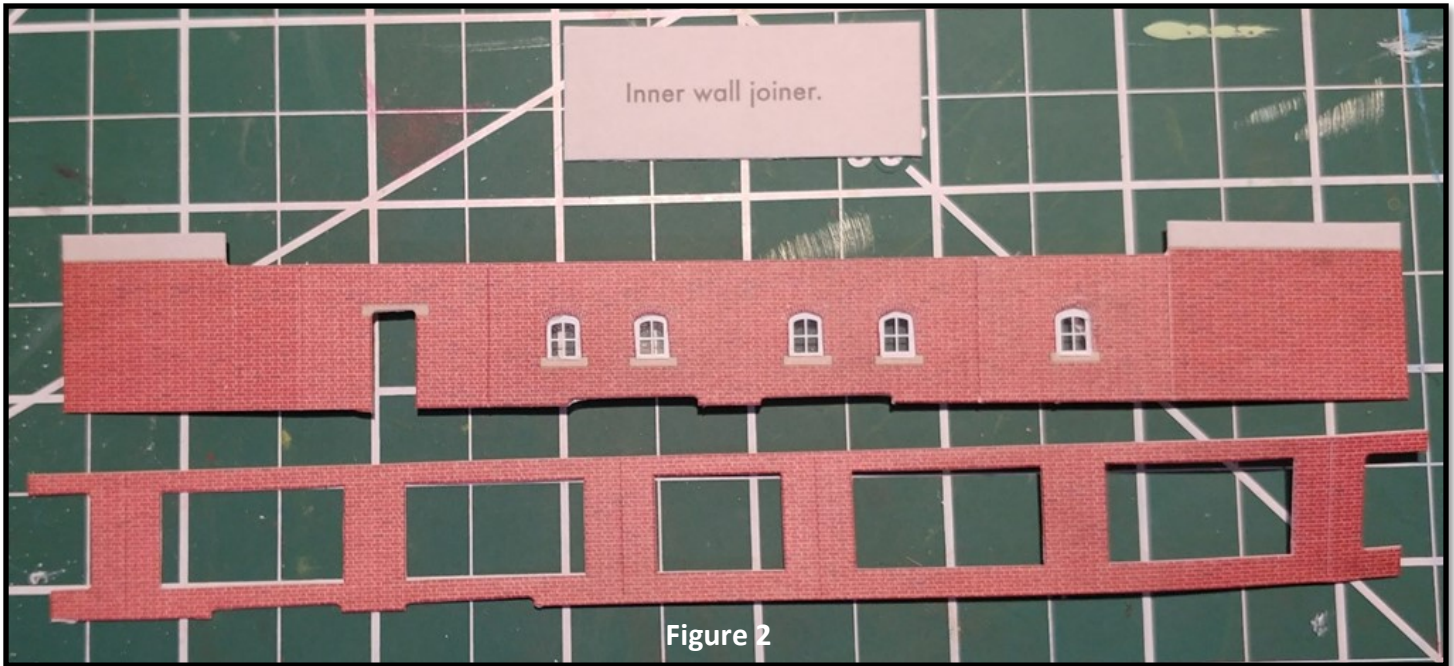


Figure 2

The next step was to glue up the lower level of the tower. The pieces used for the lower level are shown in **Figure 2**.

First, the piece with the installed glazing is folded so that the two ends butt together. The Inner Wall Joiner is glued over the inside of the butt joint. Next the outer wrapper is folded and glued over the brick portion with the glazing.

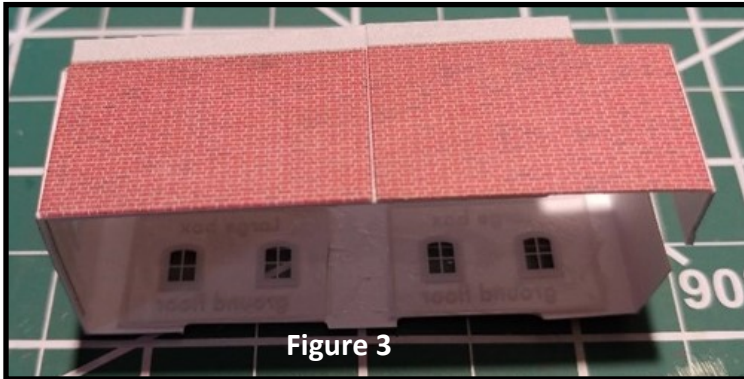


Figure 3

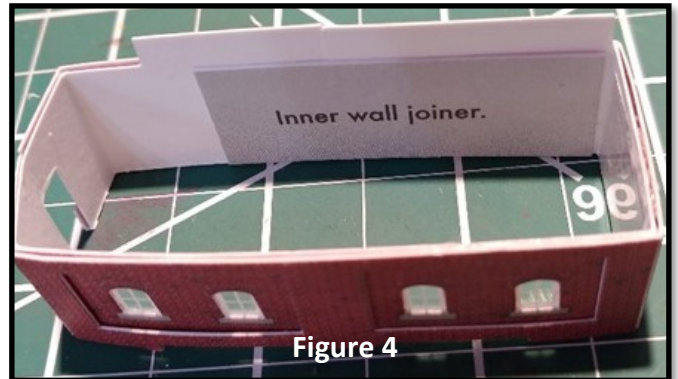


Figure 4

**Figure 3** shows the exterior of the butt joint. **Figure 4** shows the entire lower assembly glued together from the top. After this picture was taken, I added more glue into the top and bottom seams since the original glue quantity created unsightly and flimsy gaps.

Next the floor for the second level is installed (**Figure 5**). The piece is folded and glued in the folded position. Then it is glued to the top of the lower level. One of the things I learned in this step is that when the instructions say to “fix” something, that meant to glue things together. The instructions use the term glue and fix interchangeably. I know it is a little thing, but it did throw me off. When reading the instructions, I must remember this is a kit from the UK not from the US, so the language sometimes needs a bit of translation. I failed to get a photo of the floor in place without the upper level.

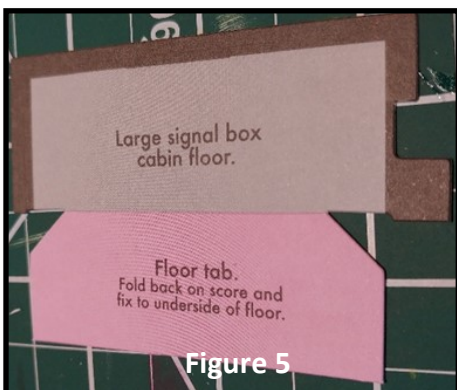


Figure 5

After learning the process for the lower level, gluing together the layers of the upper level went a bit smoother.



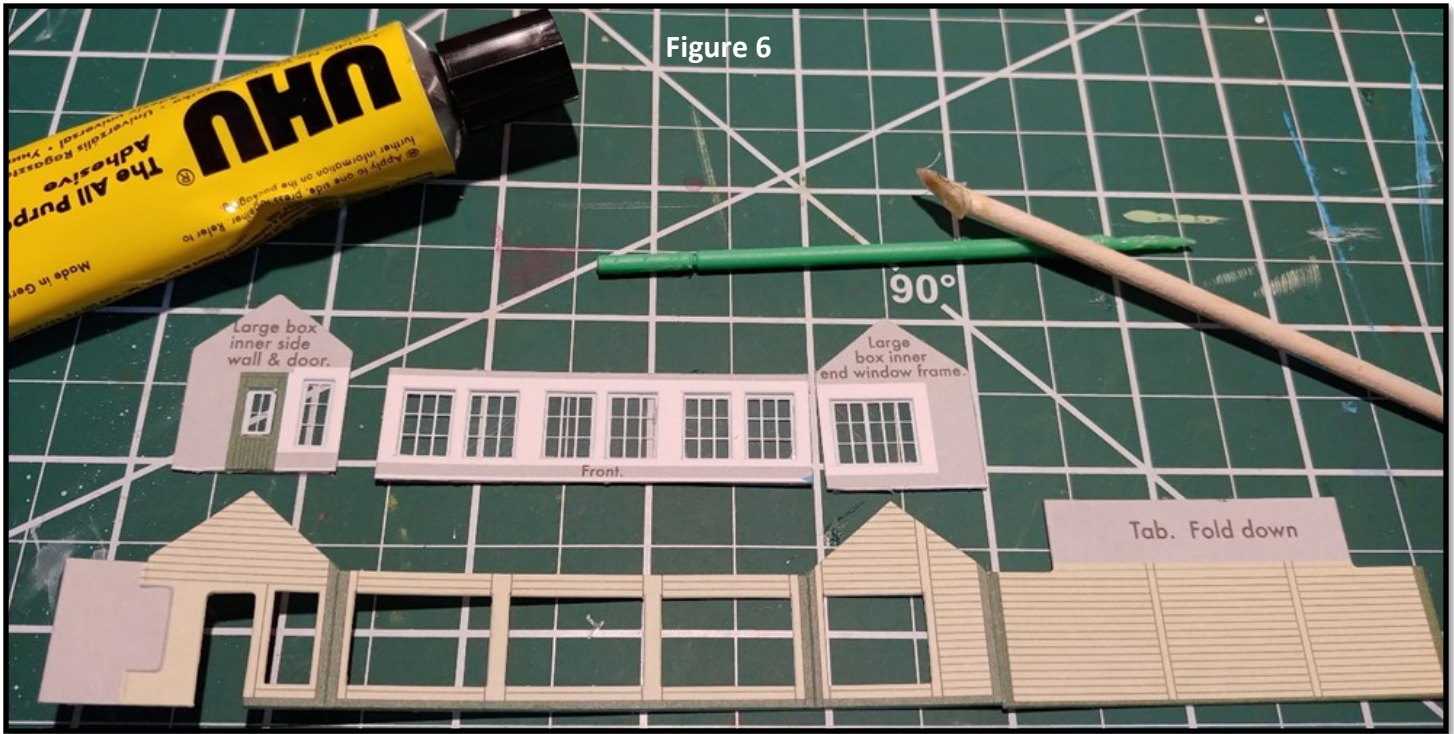


Figure 6

**Figure 6** shows the elements of the upper floor assembly with my glue and my glue spreaders. The green spreader is a micro brush with the fuzzy end snipped off. The brown glue spreader is a manicure orange stick that I had previously used to spread glue and had left on my matt in a pool of glue. When the glue dried it created a nice “paddle” at the end of the stick. While not intentional and I should not have left it in that manner, it does make a nice glue applicator for larger flat areas.

To assemble the upper floor, one first must fold down the tab that reads “Tab. Fold down” and glue it to the wall. Then one folds the gray tab on the left so that the short portion sticks out away from the printed wall at a ninety-degree angle. The larger portion of the gray tab will be glued to the back wall after the upper floor is folded. The smaller portion of the gray tab will later serve as the attachment point for the toilet cubicle that will be constructed in following steps. Once the folded and glued, the assembly is stable, and the glazing is installed into the upper level (**Figure 7**).

The upper level is glued to the floor that was earlier glued to the lower level. I found that this step required about four hands! **Figure 8** on the next page shows the



Figure 7



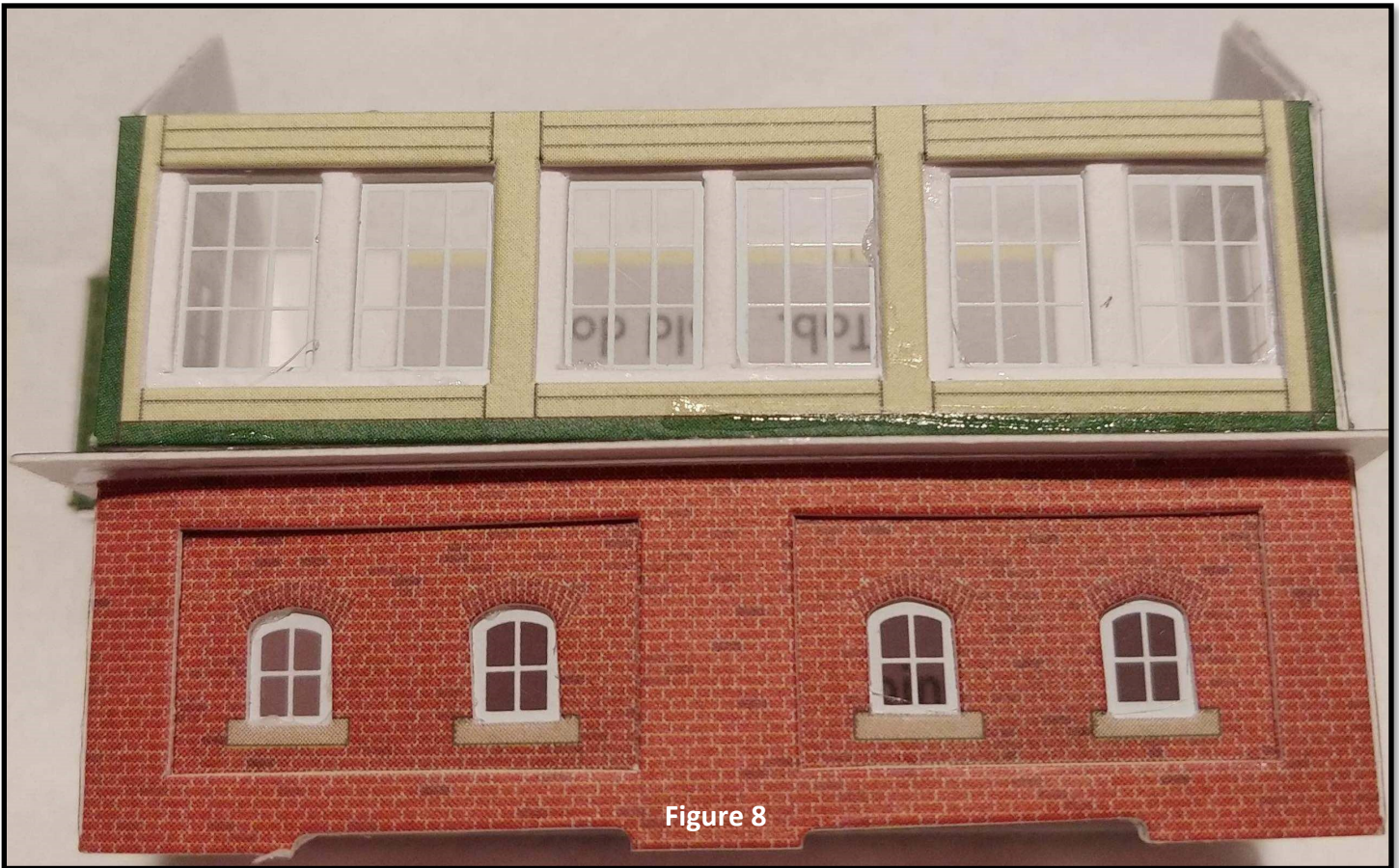


Figure 8

two levels glued together.

And this is where the drama of modeling happened! I could not find the punched-out piece of cardstock for the toilet. I have intentionally kept every little scrap of card stock as it would be too easy to throw out a vital piece. Some of the pieces of this kit are very small. I emptied my container of parts and went through all off the little pieces. No toilet! I looked at the “sprue” and thought about creating one from left over card stock – since the sprue retained the correct outline. I thought all my “arting” practice would help with the painting skills to make my scratch-built toilet match the rest of the kit. Then I took a deep break and thought “What would my loving spouse suggest I do?” He would ask me to look over everything one more time and slowly – just to make sure that I hadn’t missed the toilet hiding somewhere. I found it **(Figure 9)**. It was caught within a seam of the plastic zipper bag I have been keeping my kit parts within. Crisis averted!

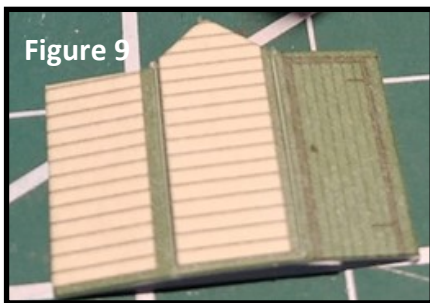


Figure 9

I quickly folded the toilet and glued it into place **(Figure 10)** so that I would not have another opportunity to lose it. Then I had to remove the toilet bracket from the sprue. I had not done that earlier as advised by the instructions because it is so tiny and easy to lose. I am really glad I made that decision. This was a situation where I used my tweezers to hold the bracket in place as the glue was drying. The assembled toilet cubicle with its support is pictured on the right.

In the next installment of this series, I will finish the construction of the building and discuss dealing with the ugly white lines caused by folding the cardstock. *Chris*

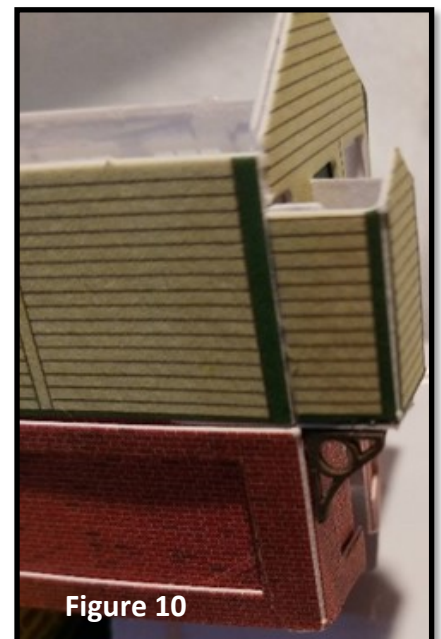


Figure 10

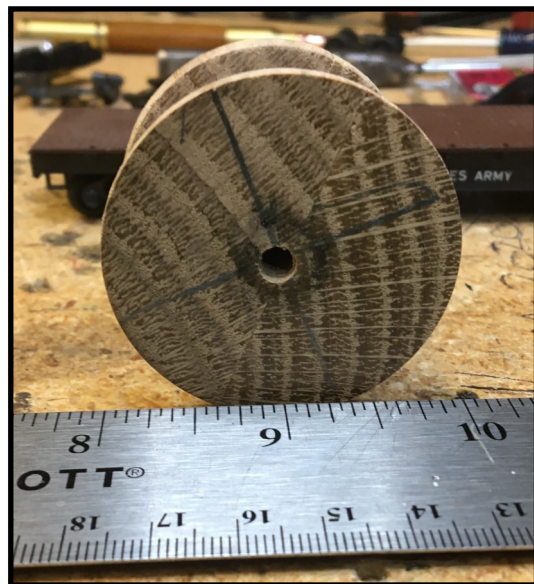


# Cable Spool Loads in HO Scale

By Alan Meinhold

When I got my wood lathe a few years ago, I was turning pens, toothpick holders and handles for ice cream scoops and pizza cutters. Last month I made a toolbox with drawers. I made 12 drawer pulls, and after turning about the 9th pull, I could see the shape of a spool that could be used for wire or heavy cable.

I had 3 extra blanks left over. I turned them to a diameter of about 2 inches. Next I parted them off the width of a flat car. Then I marked out the flanges and then cut out the center where the wire or cable would be wrapped around. As you can see these spools are empty. The next ones I make I will not cut out the center so deep. That way it will not take as much material to make a loaded spool. I am open to ideas what I can use for wire or cable to make the spools look loaded. *Alan*





# To “MU” Or Not To “MU”, That Is The Question

By Tom Katafiasz, Ross Boelling, Ben Boelling, and Ray Brady

In preparation for this Brass Pounder issue, Tom Katafiasz submitted photos of a modeling enhancement he has made for some of his HO locomotives. In his words, *“The Union Pacific uses “MU” cans on certain of their locomotives to store and secure “MU” cables. If a modeler is highly detailing certain UP locomotives that use the “MU” cans, it would certainly add to the more realistic appearance of the locomotive model to include them. I have used K&S #5101, 3/32 aluminum tube, painted black to model the “MU” cans. I have enclosed these photos of both prototype and HO models depicting the “MU” cans on the locomotives.”*



Prototype



Model

The cans are nothing more than a holding spot for an unused cable end. In the prototype picture above, the cable would be plugged into the round red receptacle on the right side above the plow. If there was a cable plugged in and the engine was running alone, the other end of the cable would be stuck in the can to keep it from dragging. Pictures of engines with cables using the cans are shown on the top of the next page.

Of course, this triggers the inevitable questions of what MU cables are, what do they do, how do they do it, and how are they used relative to distributed power. That led to the following investigation. My thanks to Ross Boelling (Retired Dispatcher for BNSF) and his son Ben (mechanic in the Union Pacific locomotive shop in North Platte )for their input. In addition, The Railway Technical Website ([Here](#)), and the American Public Transportation Association document APTA **PR-E-RP-017-99** (*Recommended Practice for 37-Point Control and Communication Trainlines for Locomotives and Locomotive-Hauled Equipment*) was used for some of the detailed information discussed below.





MU cables are about 6' long and run between locomotives of a consist. They allow an engineer in one cab (usually the lead engine) to control the other locomotives running together in the consist. The consist may be either "road" engines, or "yard engines." The locomotives equipped for consisting have standard electronics onboard that allows the engineer in the lead unit to control the other units in the consist via the "extension cord" between the engines in the consist. (I'll leave the "How do they do it" to the electrical engineers.)

But the functions the engineer has available for the consisted engines is determined by the circuits in the MU cable.

The MU cable is made up of a set of 27 wires (either #12 or #14) that carry 0-74 Volts DC to control solenoid circuits in the locomotive as well as enabling alternator excitation and the power governor. The APTA Recommended Practice indicates that up to 27 circuits are controlled through the MU cable, depending on the type of motive power in the consist. Circuits for the 27 wires in the cable bundle are indicated in the table on the top of the next page. As noted, the pin arrangement is standardized for 5 different types of diesel-electric locomotive applications.

From the Railway Technical Website, here are some notes about the various circuits:

- "2. **Alarm Bell:** *This alarm rings in all units when a damaging condition is detected. The fault is shown by indicator light or computer screen only on the affected unit. Turning the isolation switch in the cab of the affected unit will silence the alarm bell, except in case of a hot engine.*
- "5. **Emergency Sand:** *When the train brakes go into emergency, the sanders are actuated in both directions on all units.*
- "10. **Wheel Slip Indicator:** *While under normal conditions the engineer isn't even aware or concerned about the automatic regulation of wheel slip, if it becomes too much for the circuits to handle this light indicates the need for the engineer to reduce the throttle or take other steps. It can also indicate a locked-up wheelset.*



## American Public Transportation Association Recommended Practice for 27-Point MU System

Pin	Diesel Electric Locomotives	Cab Car Compatible Diesel Electric Locomotive	Electric Locomotives	Electric Locomotives Equipped for Diesel Electric Locomotives	Dual Mode Cab Car Compatible with Diesel-Electric or Electric Loco
1	Spare	Spare	Pantograph Raise	Tap Changer	Tap Changer 11KV25HZ
2	Alarm Bell	Alarm Bell	Alarm Bell	Alarm Bell	Alarm Bell
3	D Throttle	D Throttle	Brake Bail Off	D Throttle	D Throttle
4	Control Negative	Control Negative	Control Negative	Control Negative	Control Negative
5	Emergency Sand	Emergency Sand	Emergency Sand	Emergency Sand	Emergency Sand
6	Generator Field	Generator Field	Motor Setup	Motor Setup	Generator Field
7	C Throttle	C Throttle	No Power Brake	C Throttle	C Throttle
8	Forward	Forward	Forward	Forward	Forward
9	Reverse	Reverse	Reverse	Reverse	Reverse
10	Wheel Slip	Wheel Slip	Wheel Slip	Wheel Slip	Wheel Slip
11	Spare	Spare	Auto Power Limit	Auto Power Unit	Auto Power Unit
12	B Throttle	B Throttle	Fault Trailing Unit	B Throttle	B Throttle
13	Control Positive	Control Positive	Control Positive	Control Positive	Control Positive
14	Spare	Spare	Pantograph Lower	Pantograph Lower	Pantograph Lower
15	A Throttle	A Throttle	Tap Changer 11K@25HZ	A Throttle	A Throttle
16	Engine Run	Engine Run	Spare	Spare	Engine Run
17	Dynamic Brake Setup	Dynamic Brake Setup	Dynamic Brake Setup	Spare	Spare
18	Remote Loadmeter	Remote Loadmeter	Tap Changer 25KV@60HZ	Tap Changer 25KV@60HZ	Tap Changer 25KV@60HZ
19	Remote Loadmeter	Remote Loadmeter	Tap Changer 12KV@60HZ	Excessive Traction Motor Current	Excessive Traction Motor Current
20	Dynamic Brake Warning	Dynamic Brake Warning	Excessive Traction Motor Current	Spare	Dynamic Brake Warning
21	Dynamic Brake Start	Dynamic Brake Start	Spare	Spare	Spare
22	Compressor Sync	Spare	Prop Signal Current Loop	Spare	Spare
23	Manual Sand	Manual Sand	Manual Sand	Manual Sand	Manual Sand
24	Dynamic Brake Excitation	Dynamic Brake Excitation	Spare	Spare	Spare
25	MU Headlight	MU Headlight	MU Headlight	Spare	Spare
26	Remote Reset	Remote Reset	Fault Reset	Fault Reset	Fault Reset
27	Spare	Spare	Prop Signal Current Loop	No Power Brake	No Power Brake

- "13. **Control and Fuel Pump:** By controlling these functions from the lead cab, the ability to shut them off in case of fire is maintained.
- "16. **Engine Run:** This provides the power to actuate the governor solenoids.
- "17. **Dynamic Brake Control:** Actuates the switchgear to change the unit from power to dynamic braking.
- "20. **Dynamic Brake Warning:** While the dynamic brakes are normally limited to the proper value for each unit, this light warns of a control failure and the need to reduce dynamic braking effort.

- “21. **Dynamic Brake Interlock:** Prevents operation of the dynamic brake if the switchgear is not properly set-up.
- “22. **Air Compressor Control:** The air compressors on each unit are made to act as one to share the load and increase the capacity of the air system.
- “23. **Manual Sand:** The engineer can activate this at will, and each unit will apply sand on all axles in the direction of travel.
- “24. **Dynamic Brake Excitation:** A variable voltage that controls the excitation of the main alternator to control the degree of braking effort. Note that even though a unit may not be equipped with dynamic brakes, it still has the wires to pass the signals to other units in the consist.
- “26. **Ground Relay Reset:** The ground fault relay is a protective device that guards against shorts in the traction motors and alternator wiring.”

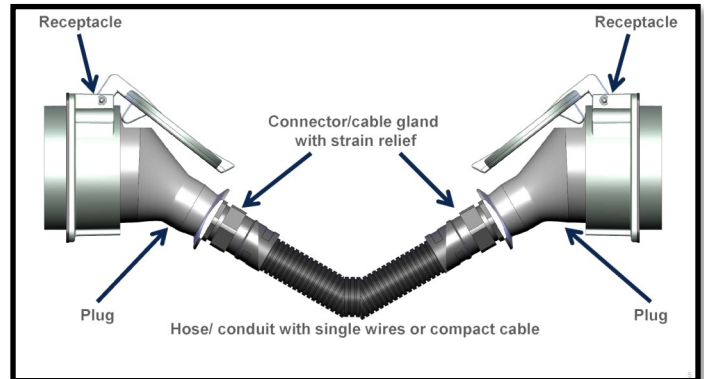
Thus, the engineer is hardwired to all the engines in his consist via the MU cables and has operability of all the engines. As can be seen in the table, the circuit control is dependent on the type of locomotive being run, but there is commonality in some of the pins.

But what happens when there are distributed power units (DPU) in a train? There clearly needs to be an alternate communication to control the engines separated from the lead consist. This author has seen trains in eastern Oregon’s Blue Mountains between Huntington and Pendleton OR along the UP line where there have been 4 engines in the lead, 5 engines at mid-train, and 4 engines in the rear on trains. (Yes, this author chases trains.) According to Ross Boelling, the mid-train engines are consisted with MU cables; the rear engines are consisted with MU cables, and one engine in each consist is linked to the lead unit via radio.

But why not use radios for all the engines. Ross and his son indicate that amount of radio traffic to each engine could lead to large amounts of interference and/or loss of signal. The MU cables provide a positive electrical connection in each consist. Thus, the engineer has control over all of the consists, but the radio traffic is limited to two radios (rather than 12 for my example) with each consist’s engines behaving as one because of the wired connection provided by the MU cable.

But what does that mean for us, as modelers? Our couplers attempt to model the brake hoses via the trip pin (on the Kadee/Microtrains/Kato/etc. couplers.) We even have the brake hoses hanging on the locomotive pilots to represent the air connections. But, for those of us that are after prototype realism in our diesel fleet, the next step in realism after setting up a speed-matched set of engines for a consist would be to model the MU cable. Some third-party manufacturers make add-on metal or plastic accessories to add to our models that represent the MU Cables. And one manufacturer supplies round rubber “cables” with magnets on each end that allow representation of engine-to-engine cable. Obviously, the cable would need to be flexible for our scaled-down models (I can see that any kind of stiffness in the MU cable would cause a disaster for my N-scale engines). A google search of “Model MU cables” will lead you to the commercial products.. However, Tom’s model of an MU cable was simply a piece of red wire glued in place with a mid-cable support to keep the cable from fouling the coupler—like the prototype.

My thanks to Tom for triggering this study, and to Ross and his son for their expertise and experience. *Ray and the Crew*





# Covid-19 Sheltering in Place

By Larry Tiffany

This spring and early summer the Covid-19 pandemic has allowed me to work on several projects in the basement. I did several things from new track work, building a new wooden kit, building a resin truck/trailer kit and then I did some painting to both brass and plastic.

One of the first things I did was to build a new depot for Central City and add a new house track:





After that, I decided to put together some lumber loads for a bulkhead flat car and lumber to fill in the empty bins in my lumber yard:





Then I built a new resin stock trailer and tractor for my packing plant:





I then decided to do some painting of models on my layout. The first thing I painted was a 57' reefer:



I then painted a Union Pacific CA-5 modernized caboose in newer paint with black outlined lettering and numbers:.. *Larry*





# North Platte Nebraska Visit

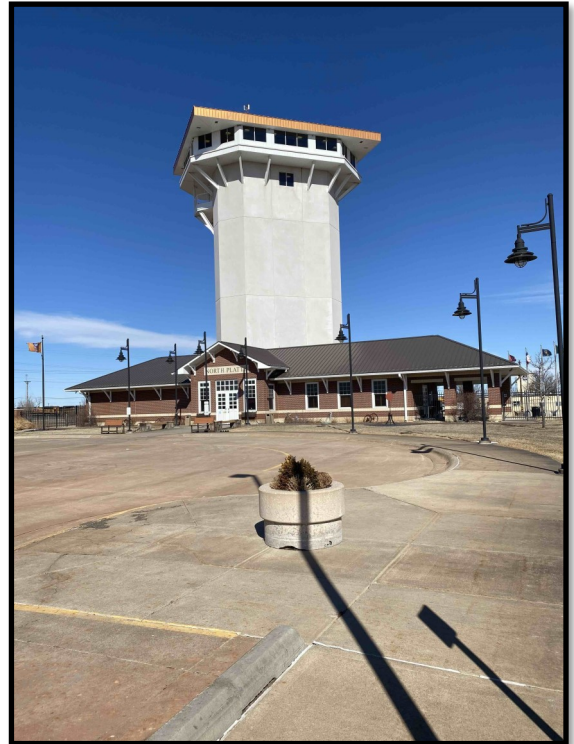
By Ross Boelling

I had an opportunity to visit my son and family in Maxwell, NE during the end of February. He is a machinist for Union Pacific Railroad in North Platte. He has already been working there for 16 years. (I am finding that time DOES fly as you get older!!)

On February 28, since I was in the neighborhood, I took the opportunity to visit the Golden Spike Rail Tower located outside of UP's Bailey Yard.

([www.goldenspiketower.com](http://www.goldenspiketower.com)).

It opened in 2008 and is open to the public for a \$7.00 fee (\$6.00 if you are over 62) and discounted for kids. It is 8 stories tall and sits on the south side of the yard. The 8<sup>th</sup> floor is enclosed with surrounding glass so you can see over the Nebraska sand hills in all directions. The 7<sup>th</sup> floor is an outside balcony where you can brave the elements to take better pictures. There is a nice gift shop and museum located on the 1<sup>st</sup> floor. They generally have a docent on the 8<sup>th</sup> floor to answer any questions you may have. If you have not yet visited it, I recommend you try to see it at least once so you can see how a busy railroad operates.



Of course, the primary reason to go there is to railfan Bailey yard, the "largest rail yard in the world" (and I am told, if they cut it in half, it is still the biggest.) It is 7 miles from end to end and has 400 miles of tracks and 1,000 switches. If my math is correct, it would be 425 ft long and require a mere 24,275 feet of track to recreate it in HO scale. It is a primary classification yard on the UP system, and, with UP's Precision Scheduled Railroading (PSR), remains as one of the few hump yards still operating on the system.

Bailey yard is a multifaceted operation; There are two humps (East and West), fueling facilities for through trains, car repair, and a diesel shop. It serves as a crew change point for trains west to Cheyenne and East to Marysville and Omaha. Pretty much all the yard is visible from the tower.





I wondered with PSR fully in effect if I would even see any cars in the hump since their supposed focus is to keep everything moving and not sitting..... Well, I was pleased to see the humps were humping and there were even quite a few cars in the bowl tracks, so I guess PSR is relative.

There was quite a bit of activity while I was there, although not as much as what I have seen in prior visits. Enough activity to keep you interested in watching trains.

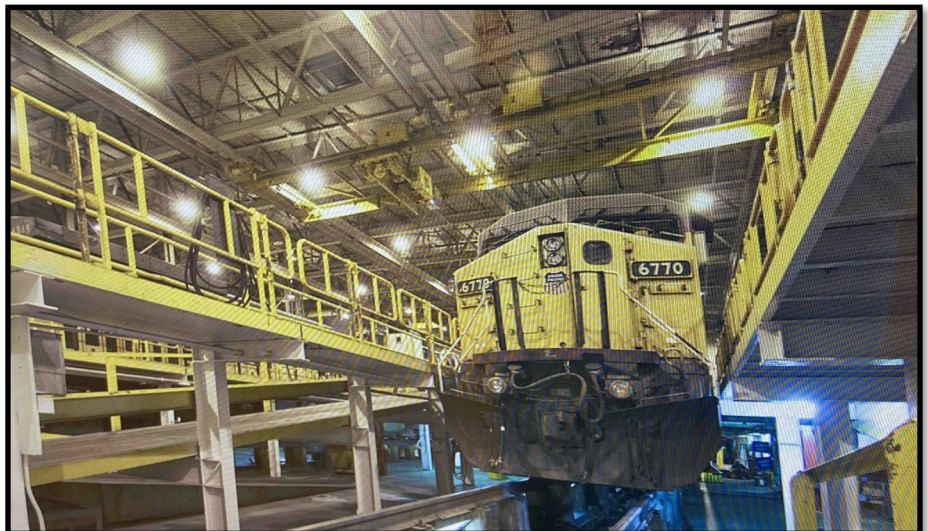
They have a four-foot square detailed HO model of about half of the Diesel Shop. Since my son works there, I will take some time to tell you how I understand things work.

### **North Platte Diesel Shop.**

The Diesel shop is just west of the tower. It is HUGE. It has 11 enclosed tracks and can hold 40 locomotives INSIDE of it, plus there are tracks on both sides that can hold many more. The shop is busy, and since UP has closed their Little Rock, AR shop for PSR, North Platte is in the process of picking up more work, including complete engine replacements that used to be done in Arkansas. If you like to look at a few hundred million dollars of horsepower at one time, this is the place to go!!

The shop has two locomotive wheel true machines. The lathe can turn the wheels while they are still on the locomotive. There are gondolas sitting outside of each wheel true machine to catch the metal filings. It is amazing to think that the filings in the car used to be riding the rails. As I understand it, there are a lot of requirements on the wheels: flanges must meet certain specifications, and of course the wheels must be round. But something I had not thought about. If you lathe the first wheel to make it comply, you may well also have to turn the rest of the wheels. When you turn one axle, that wheel gets smaller. If you do not make the others match, the locomotive will lose tractive effort on the now "little" wheel. So, all the wheels must be measured to make sure that the wheels within the truck and from front truck to back truck meet their criteria so there are not any problems. Ben worked a wheel-true job for several years. I would be uncomfortable sitting underneath a 205-ton locomotive all day, but I guess you get used to it.

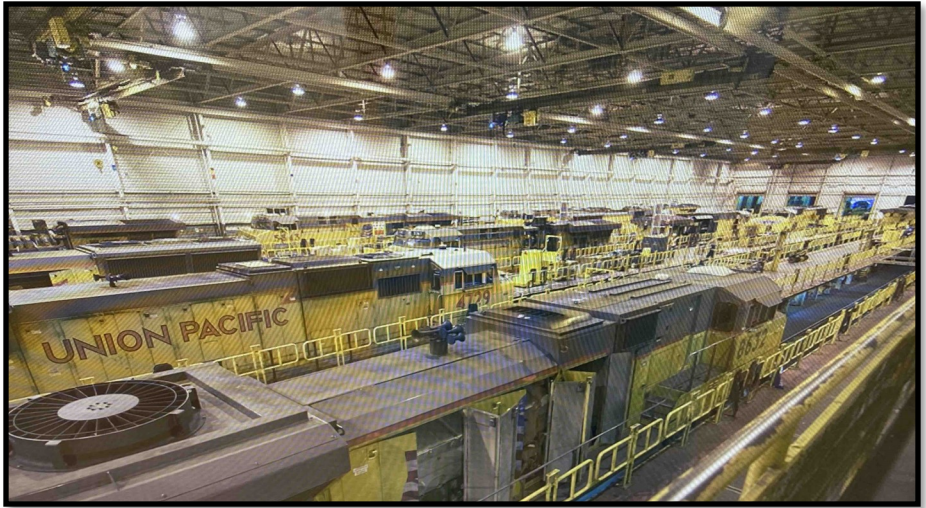
They also do traction motor changes. They do not jack the locomotive up like you do a car. Instead there is a section of rail that is a lift, but instead of raising the lift, they drop it down so the traction motor (wheels and electric drive motor) are lowered into a pit below where the machinists and electricians unhook the bad set and reinstall a new set. A traction motor set weighs about 15 tons, so it is something you do not want to drop on your toe. This is one of the more dangerous jobs in the shop as there is opportunity for the lift to fail, or something to happen to that would cause the motor to





fall and crush the workers. They have a lot of safety protocols they follow, but there is still an opportunity for failure. Ben has worked this job as well.

They also do a variety of repairs to the locomotives. Car body repairs, assembly (piston set), crankshaft, turbochargers, air compressor, electrical, and soon engine replacement. Each track usually has a specific function that it supports. Obviously, the wheel true and traction motor replacement



tracks are specific tracks for those functions. Ben has worked there long enough that he can just look at the track the locomotive is on and can tell you what is probably going to happen to it.

Of course, one of the things that goes along with the repairs are new parts. They have a big parts department in the next building. The shop planners make sure the parts are ordered so the machinists working on the locomotive do not have to stop and wait for parts to be delivered to them.

Locomotives sitting still are not pulling freight, so there is always pressure from above to make sure they are only in the shop for just the time needed to make them roadworthy again, and kick them out the door to go back to work. Of course, each locomotive is individual and has quirks and idiosyncrasies that are known to the machinists.

I always enjoy seeing what is going on at North Platte Baily Yard. Money in motion!!

Ross

## ***Director/Editor Comments***

**By Ray Brady**

So here you have another Brass Pounder. Leading up to this issue, the well was dry for articles. But, thanks to you, the members, we have some interesting articles on modeling and prototype railroading subjects this time. I hope you enjoy. Just keep the articles coming—let us know what’s happening in your world no matter what Railroading you are doing.

Going forward, the model railroad community seems to be adjusting to the Covid-19 Pandemic with more and more virtual activities. We are via ZOOM meetings. The National NMRA is readjusted the 2020 St. Louis National Convention to be virtual clinics via live streaming during the week of July 12 -18, other ad-hoc events are being held such as Ross indicated in his Superintendent News. It remains to be seen how the world adjusts, in the long run, to the legacy of this pandemic.

From my vantage point, ignoring the fact that I am in the 65+ crowd, I think the physical self-isolation must continue for quite a while. You will notice I changed the Timetable on the next page to reflect that social isolation. The October meeting was to be at my house. But, unless we get an effective vaccine, I think it would be irresponsible of me to have you all thrown together in my layout room. The situation may change, but, for now, I think I need be in “quarantine quarters.” We’ll see what happens by the next issue of the BP.

Ray

# Lyona Valley RR Improvements

By Ross Boelling



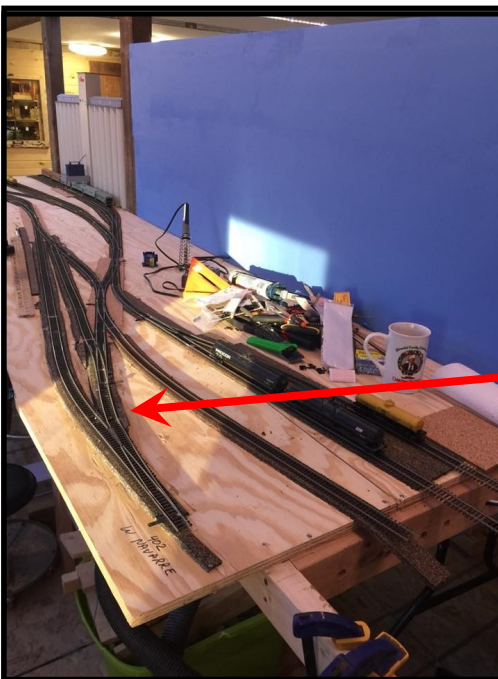
After the new Lyona Valley Railroad began servicing Navarre, it quickly discovered the original engineering was in error. To rectify this operating problem, LVRR MOW personnel undertook the task of rebuilding the tracks servicing the west end of Navarre.

LVRR General Manager Ross Boelling said *“Our crews quickly discovered that servicing our Navarre customers required the locals to use the mainline for extended periods. This was mostly due to the Navarre siding being too short. Because of the volume of through trains, Chief dispatchers were not allowing the local back out on the main, thus delaying our delivery to our Navarre customers. We rebuilt the west end of Navarre to extend the siding so the local can work without impacting the main line. This will allow our local to get their work done in a timely manner while our overworked Dispatchers can keep our mainline trains on schedule. While we were rebuilding, we replaced poor switches and track for about half of the industries. Everyone expects this will greatly improve our service to these critical customers. We were especially glad to get this work done before the harvest rush hits Continental Grain.”*

Acme Scrap and NCRA Refinery received new track and switches. The track leading from the mainline and siding to Continental Grain, Janke Fuel & Propane and the Navarre team track was also improved.

The Navarre siding extension allows about five more car lengths of room west of the West Navarre industry switch so the local can switch cars without having to enter the Mainline. Fortunately, the work was able to be done before the landscapers had started, so minimal impact to local businesses occurred. The recent outbreak of illness in the region also helped by reducing industry traffic so MOW was able to get long work windows to complete the task.

LVRR has suffered a downturn in business, but it expects the strong wheat harvest and other fall crops, as well as increased need for flour and baked products, will help lead to a very profitable 2020. Passenger traffic is expected to increase as folks avoid crowded airplanes during the illness outbreak.



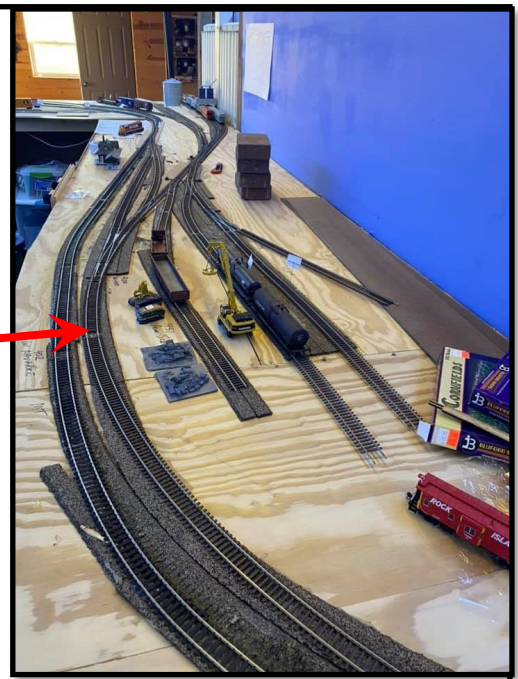
Original West end of Navarre circa 12/2017 (before the rest of the mainline was

installed). The West Navarre Industry Lead switch required the local to have mainline

access to do any work. Dispatchers were NOT happy with this arrangement.

West Navarre circa 07/2020. The new West Navarre control point is just to the bottom of this photo. This allows the local to have about

five cars of headroom on the new siding to do their work. You can also see the extended siding, new switches and re-laid track servicing Acme Scrap and the NCRA Refinery (including a new track to their coker). Trackwork was better as the Roadmaster had more experience by this time.





# Timetable

**-Mark Your  
Calendar-**



**Future**

**Kansas Central Division [NMRA](#) Meetings**

<b>August 1, 2020 1:00PM</b>	<b>Zoom Meeting</b>
<b>October 3, 2020</b>	<b>Probably ZOOM</b>
<b>December 5, 2020</b>	<b>Open</b>