

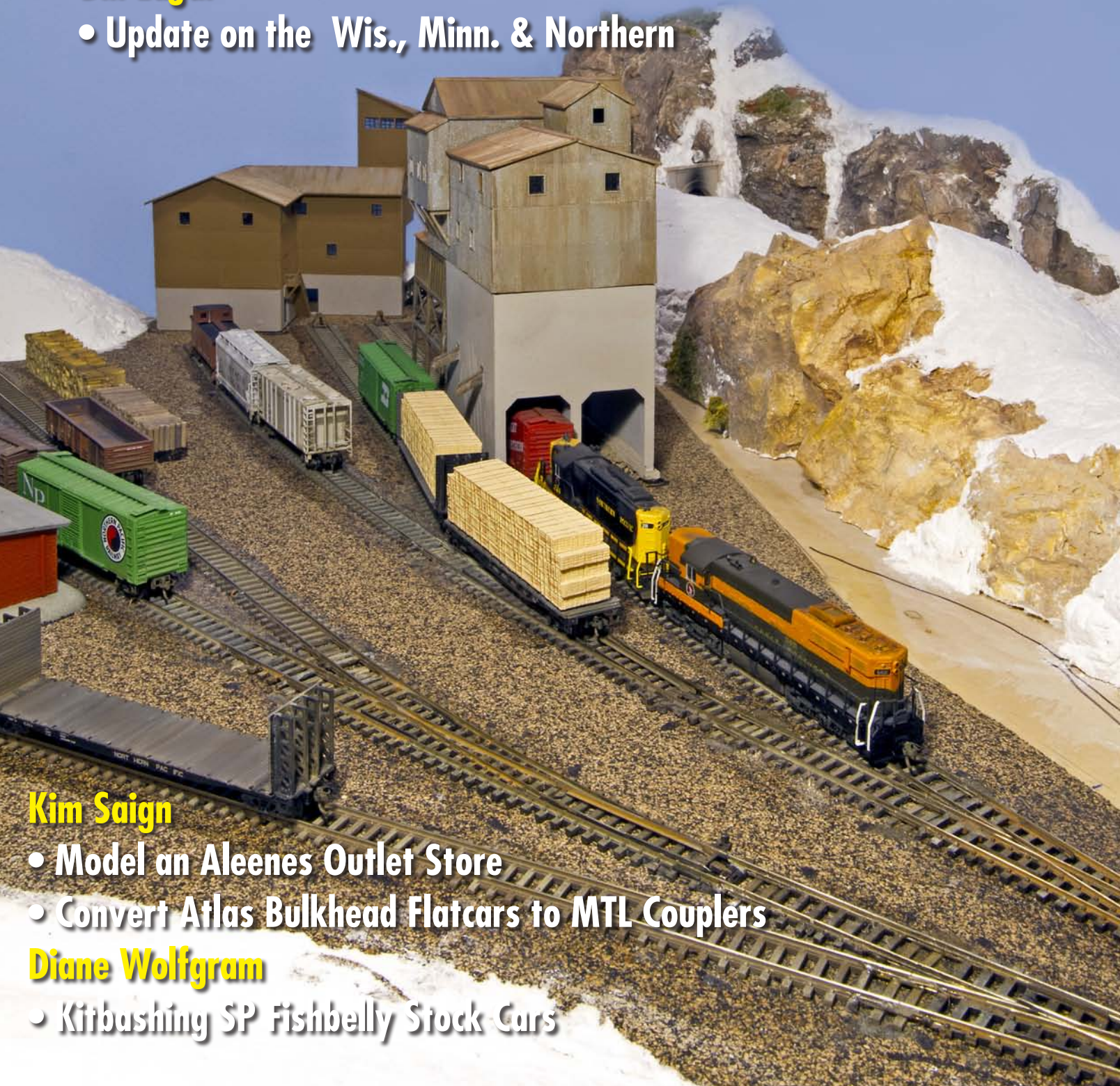
N SCALE RAILROADING

#141 APR 2022

THE BEST OF 1:160 SINCE 2000

Bill Edgar

- Update on the Wis., Minn. & Northern



Kim Saign

- Model an Aleenes Outlet Store
- Convert Atlas Bulkhead Flatcars to MTL Couplers

Diane Wolfgram

- Kitbashing SP Fishbelly Stock Cars

N SCALE RAILROADING WELCOME!

The Kelly Lake to Swan River Turn works a quarry and lumber mill at Kelly Lake before heading east to Swan River where it will swap cars with the Floodwood Turn out of Grand Rapids. It's early in the BN era (1970) and pre-merger power is intermingled, but not yet re-numbered. NSR updates Bill Edgar's Wisconsin, Minnesota & Northern System starting on page XX.

Welcome to *N Scale Railroading* #141, the April, 2022 issue.

Page 04. **New Products.**

Page 06. **Kim Saign** takes another step towards full out vertical intergration with Aleene's Outlet Store.

Page 25. **Diane Wolfgram** shares how how she modeled Southern Pacific truss rod stock cars. The prototype modeled also has different doors and roofs than the commercial ready to run models.

Page 28 **Kim Saign** had a happy fleet of MTL bulk-head flatcars... but decided to add the new Atlas bulk-head models, which are an earlier, shorter prototype. The main modifications are to accept MTL trucks and couplers.

Page 32 It is great to hear from **Bill Edgar** and his Wisconsin, Minnesota & Northern System. Bill shares how he operates in the early BN era and starts scenery. Nice to see great graphics in NSR again!

Page 41. **NCalendar** and **NSR Contributor preview.**

NSCALE RAILROADING

APR

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PUBLISHER & EDITOR

Kirk Reddie

nscalerailroadn@aol.com

Mr. Answering Machine

206•364•1295

ADVERTISING SALES MANAGER

(ADVERTISING ONLY)

Denny Hamilton

262•347•1068

nsrdennyads@aol.com

PREVENTOR OF GARBALANCHES

Elaine R. R.

SUBSCRIBER #141

Rod VonBernuth

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ISSUES 001-117

ART DIRECTOR

Bill Edgar

PHILOSOPHER KING OF HUE

Spencer Rossman

SLAYER OF UNINTENTIONAL

GRAMMATICAL ATROCITIES

Dennis Hartnett

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N SCALE RAILROADING NEW PRODUCTS



RailSmith is offering rolling stock to assemble the Southern Pacific's 1950 *Cascade*, which ran from Oakland, CA to Portland, OR. First up were a pair of coaches. Just released are 10-6 sleepers SP 9032 and 9033. Future tooling include the 10-6 with blunt end 'observation'. When the train was inaugurated, there were four extra sleepers so daily Oakland to Seattle service could be operated.



Also just released: Northern Pacific 364 is RailSmith RS-303202. To equalize mileage, the NP had two 10-6 sleepers (364 and 365) that were part of the *Cascade's* three sets of four cars that served the Oakland to Seattle service. Maybe someday (Lowell hasn't said 'no') we'll see the 4-4-2 and 22-roomette cars in this service... this is a great start!



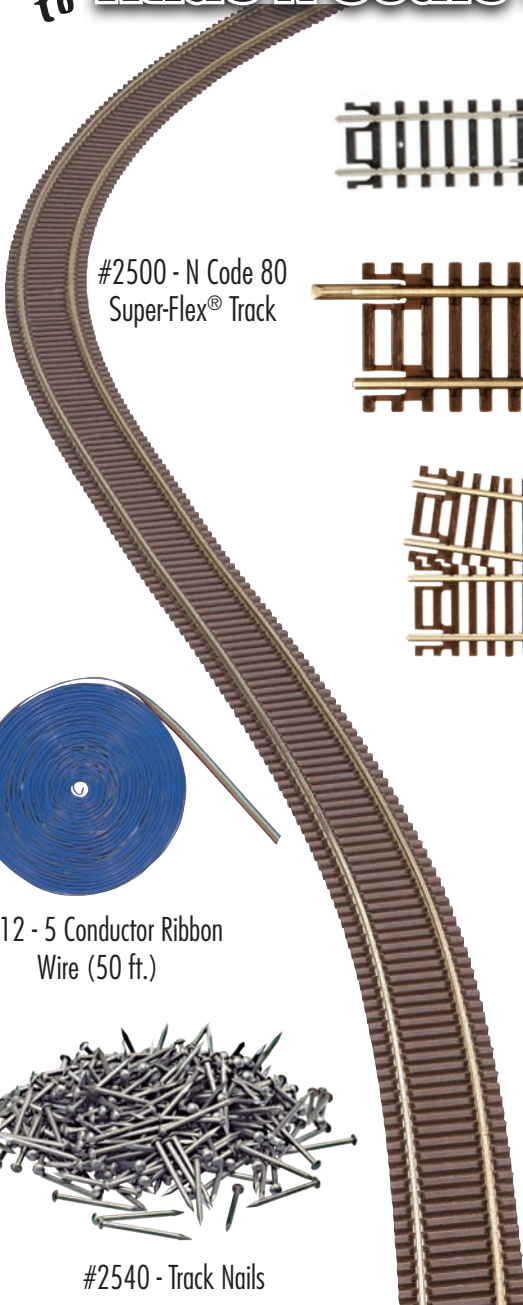
Left and right. RailSmith cars have great packaging.



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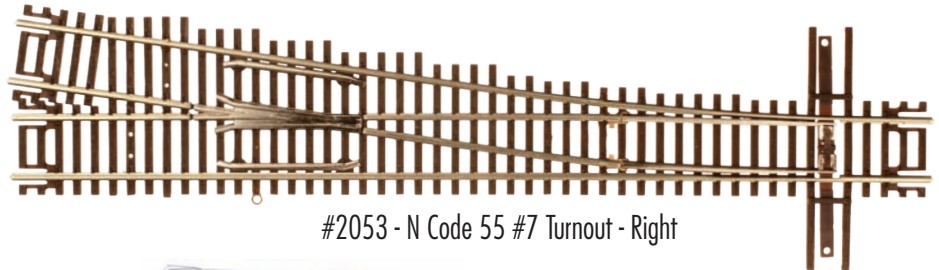
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ALEENE'S OUTLET STORE

By Kim Saign/ Images by author



00

Image 00. The origin of this project is I was about to build a large bakery (see NSR Mar-2022 #140) with parts from Scale Railroad Models. Their products are 3D printed. I had not worked with this material before so I asked the owner Eric L. Smith if he had any scrap material I could experiment with. I figured I might get a wall or two. What he sent was the 4 walls

for the "City Café" in Hearne, TX that had the brick pattern printed poorly on a couple walls. Interestingly I had eaten in the real City Café a couple years before. I decided to honor Aleene's tacky glue with an outlet store. See NSR #94 (M/A 2016) for more on the saga. Today business is brisk at the outlet. Looks like the local funeral home is stopping by to get more for casket repair, again.

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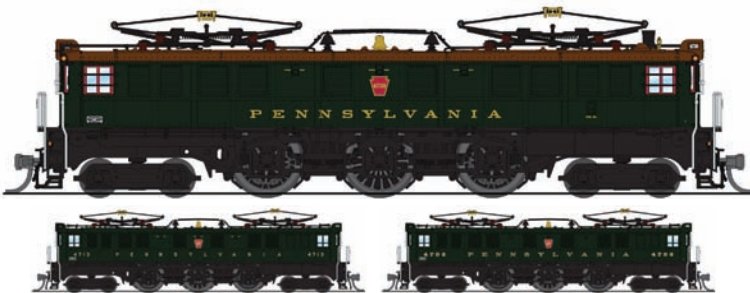
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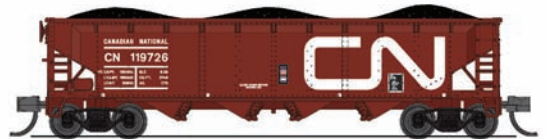
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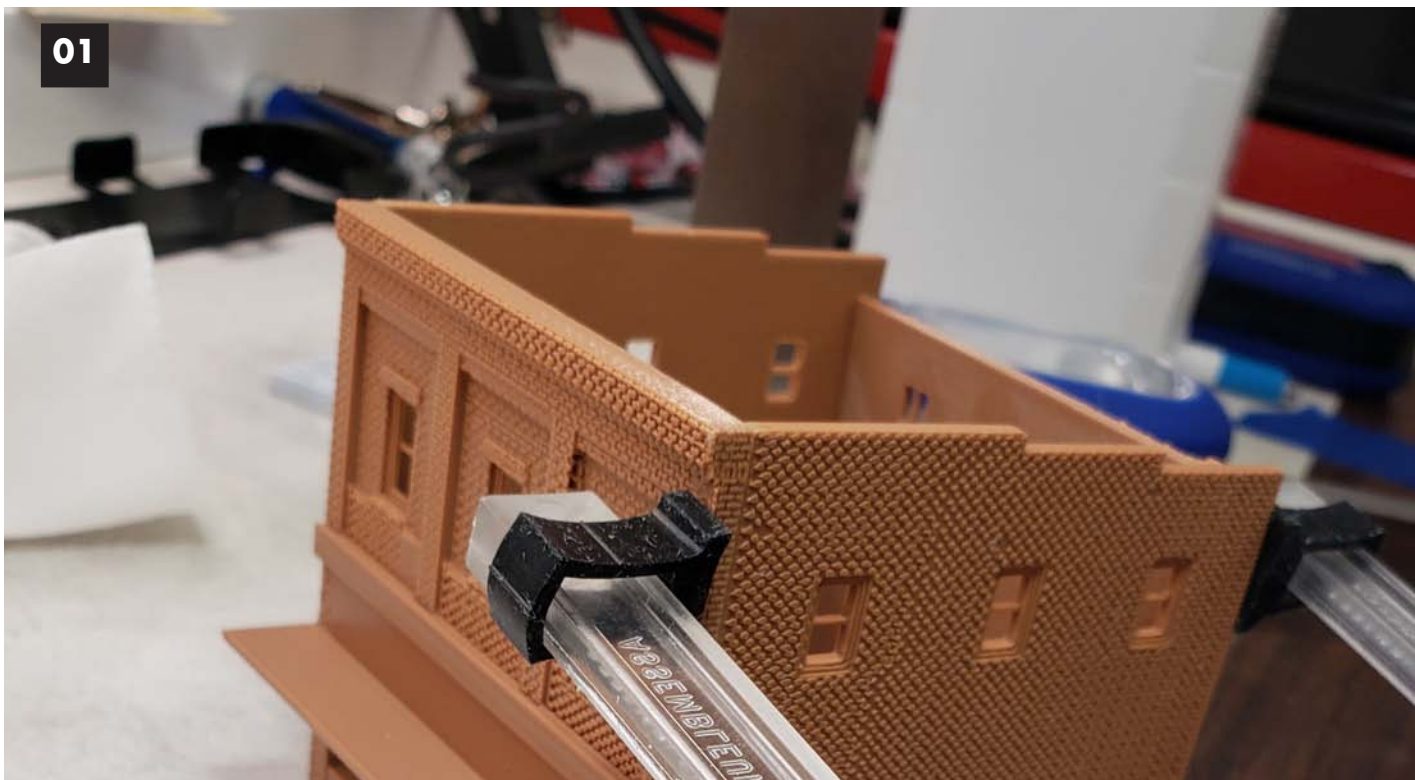


Image 01. Eric indicated Tenax 7R or similar plastic cements work on this material. He was right. I didn't have any Tenax 7R

but I did have Flex-I-File Plast-I-Weld which is about the same. The walls came together quite well.

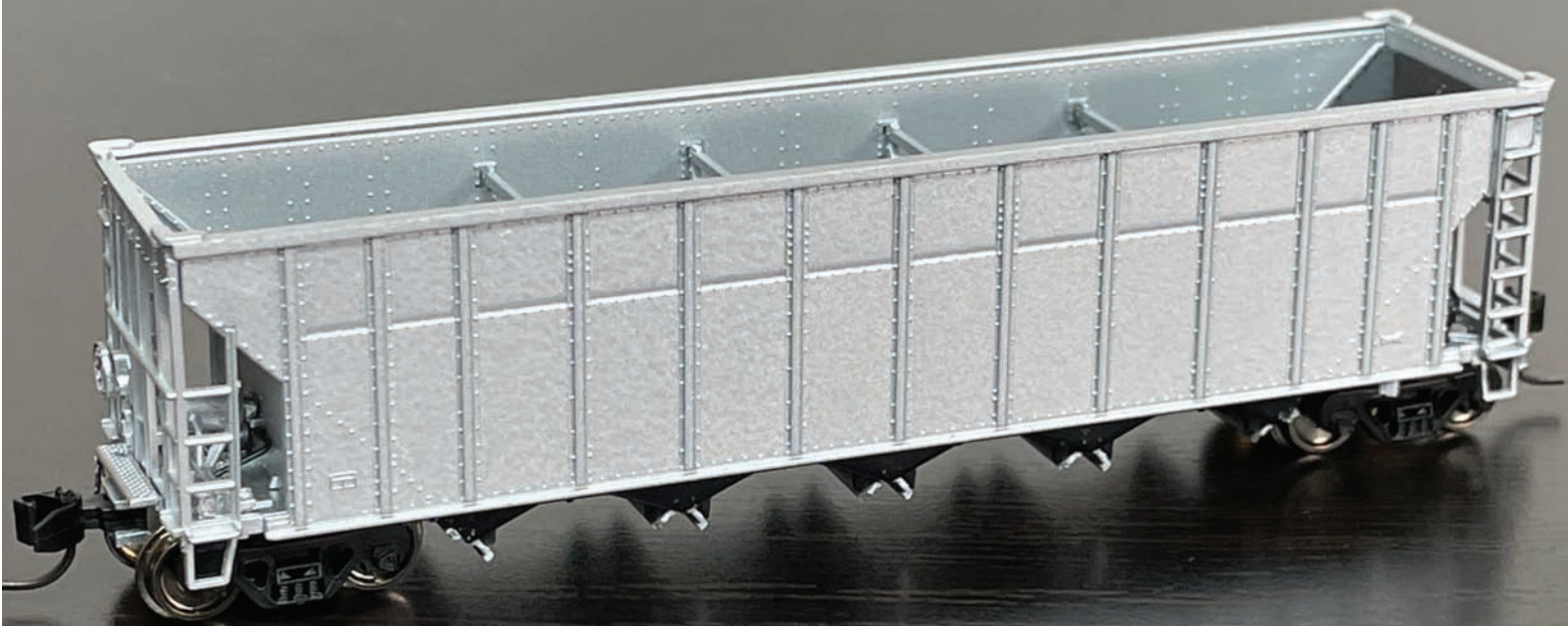
02



Image 02. I shot the interior Afrika Mustard from Model Masters for a nice neutral color. Then I masked the interior and shot the awning black. Then I masked the awning and shot the

exterior white. The reason for the white is I wanted white window frames. So I masked off everything I wanted to be white as we see in this picture.

COAL!



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03



Image 03. Above the roof line I also needed the wall to be the same color as the exterior so the masking was peeled back.

04



Image 04. After all the masking the building was sprayed with a brick color. Then the masking was removed, rendering a pretty good looking building. The brick pattern flaw on the left

was the reason this wall was considered scrap. Normally the pattern is fine.

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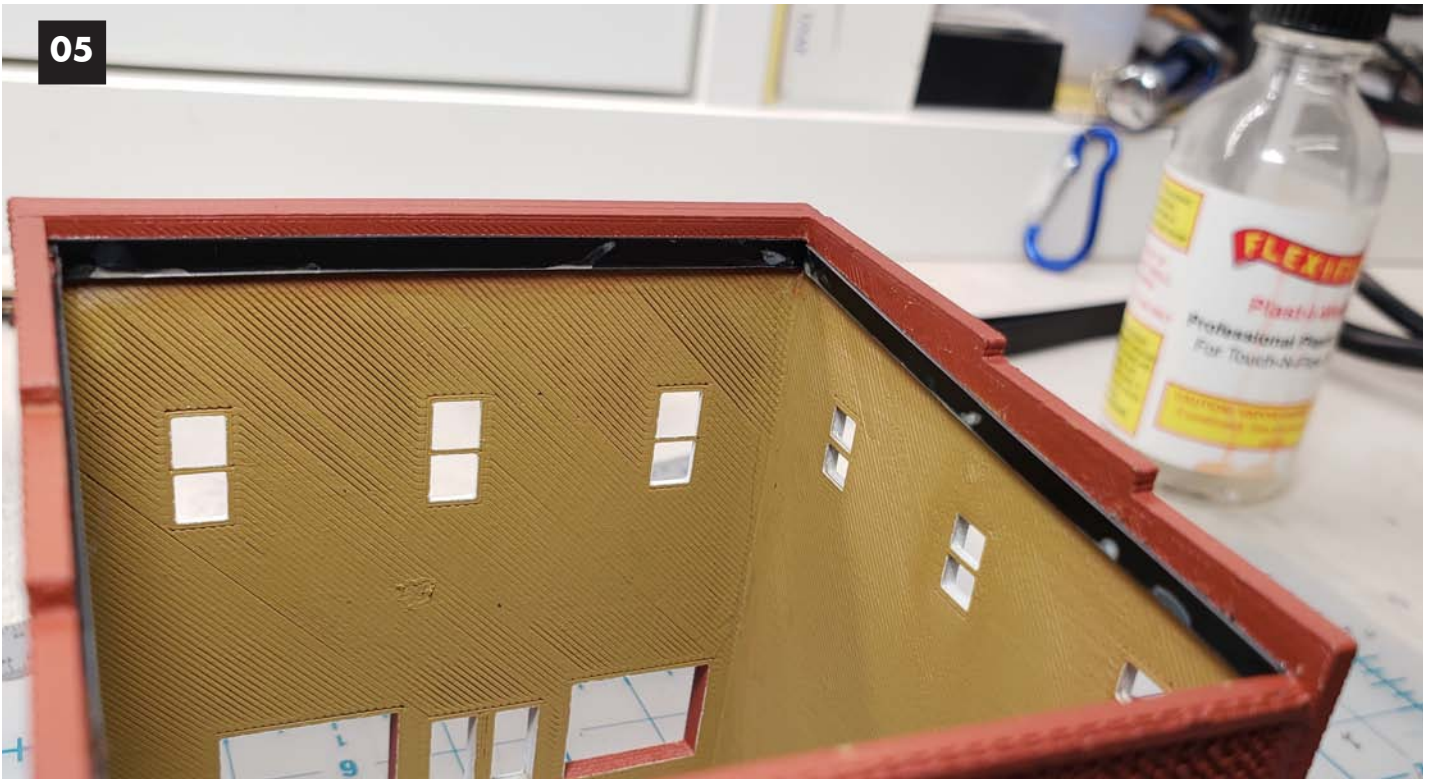


Image 05. These black plastic strips were added for the roof to rest on. Line them up with the top of the rear wall and angle them upward towards the front wall.

06



Image 06. For the roof, cut a piece of .015 styrene that overhangs the rear wall. Then spray it black. Then spray with Krylon stone fine texture to give the tar and rock look.

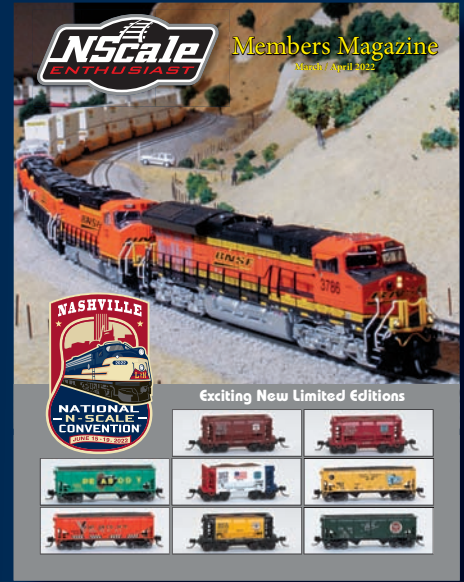


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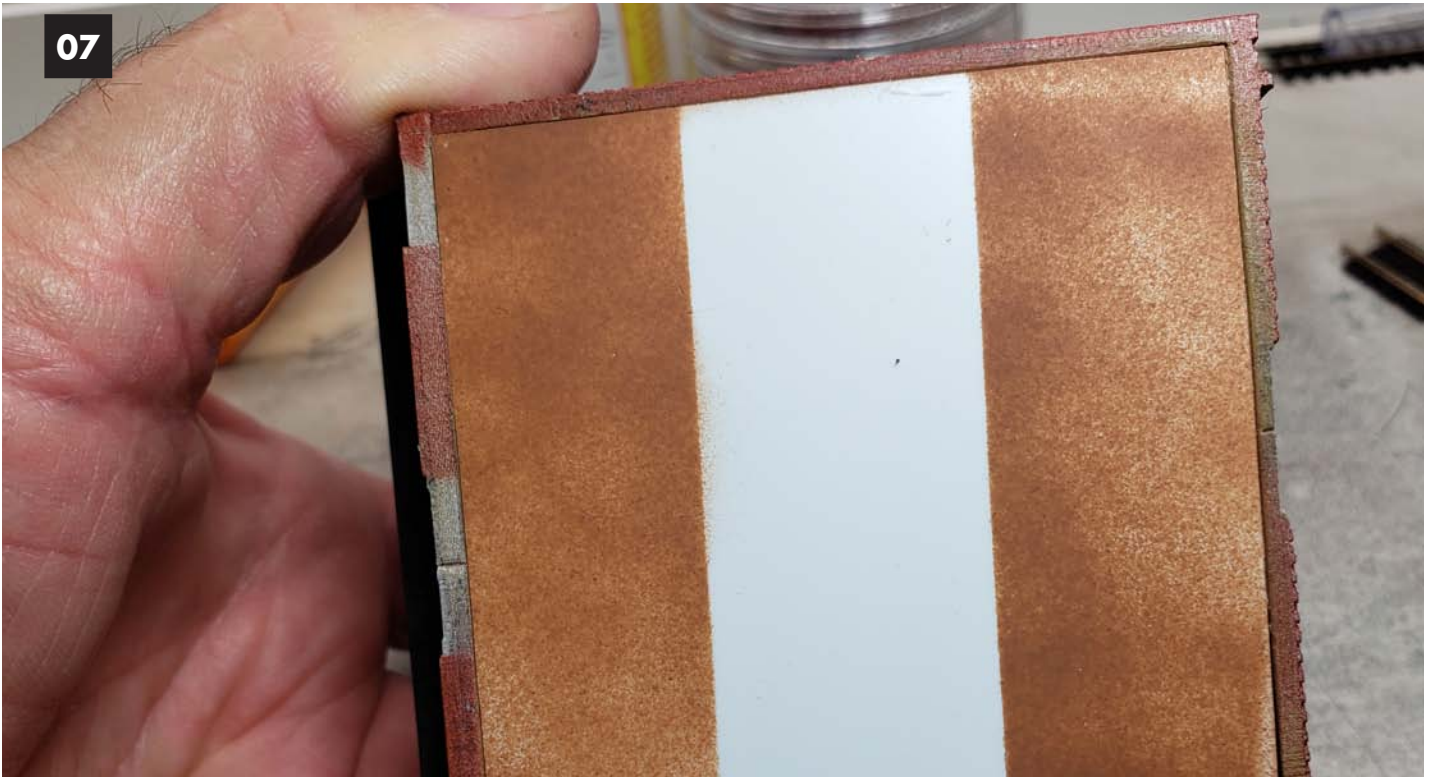


Image 07. The floor is .020 styrene cut to fit then painted brown on the top side. It doesn't have to be a perfect fit because it will barely be visible. Glue it in with plastic cement.

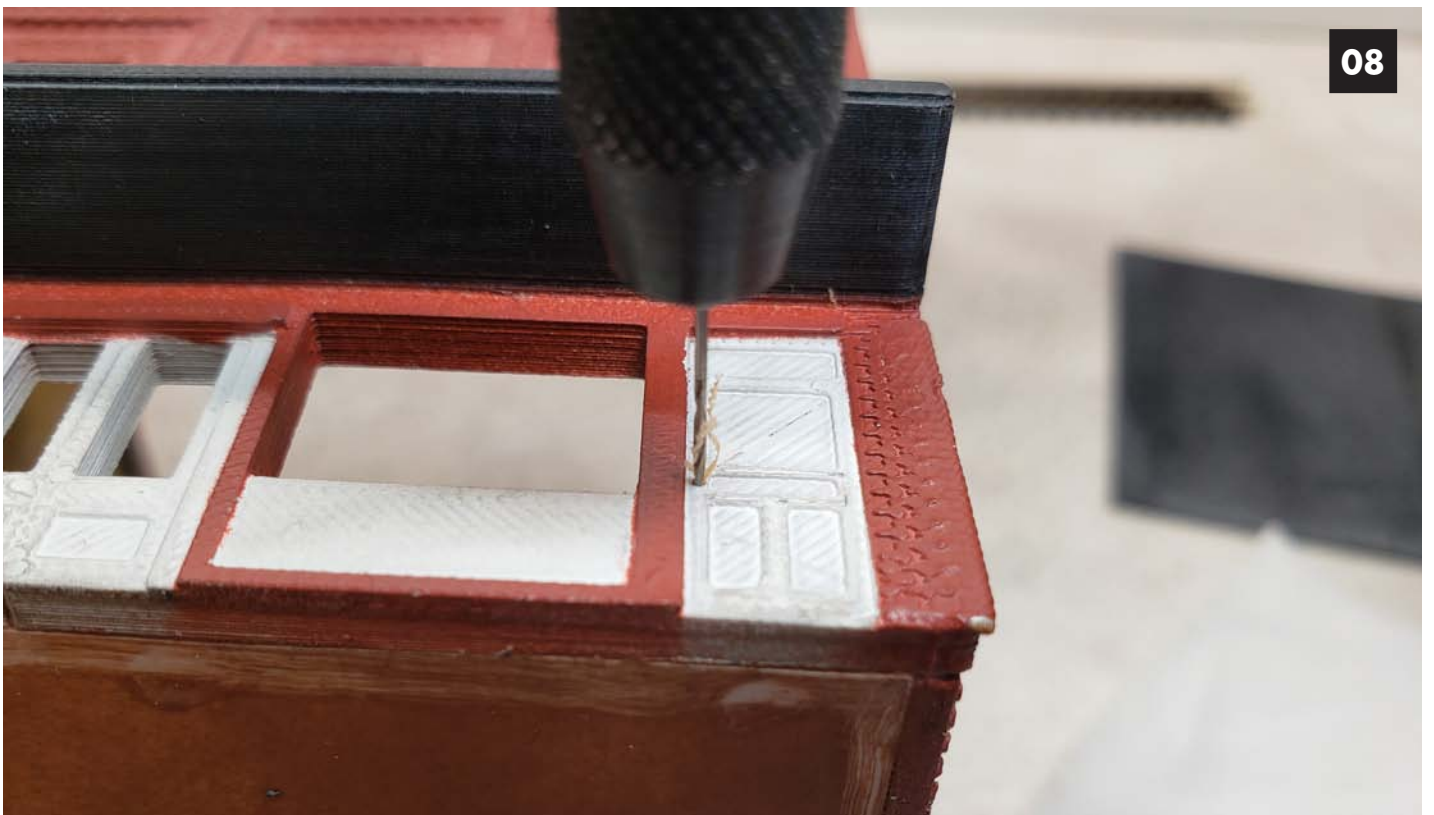


Image 08. Now is the time to put door knobs on the doors. I like to use .022 brass rod. So a #74 bit is used to drill the hole.

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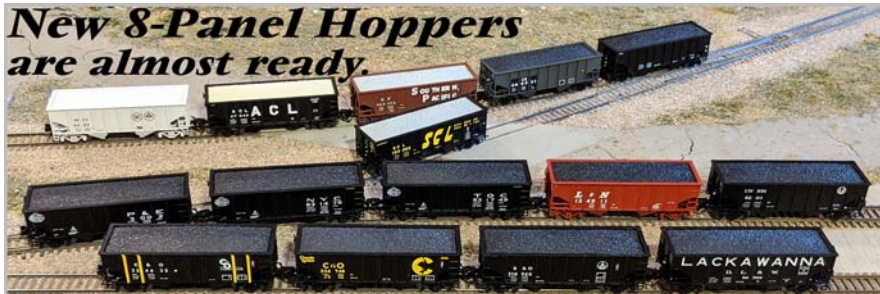
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09



Image 09. Shove the brass rod in the hole and cut off with flush cutters. While it doesn't look like a door knob this close. When you get 12" away you can tell there is a brass door knob. This is a very easy detail to put on most any building.

10



Image 10. I like real glass for windows. Using slide glass is an easy and inexpensive way to cover several windows at a time. I just put dot of CA between the windows to hold it in place.

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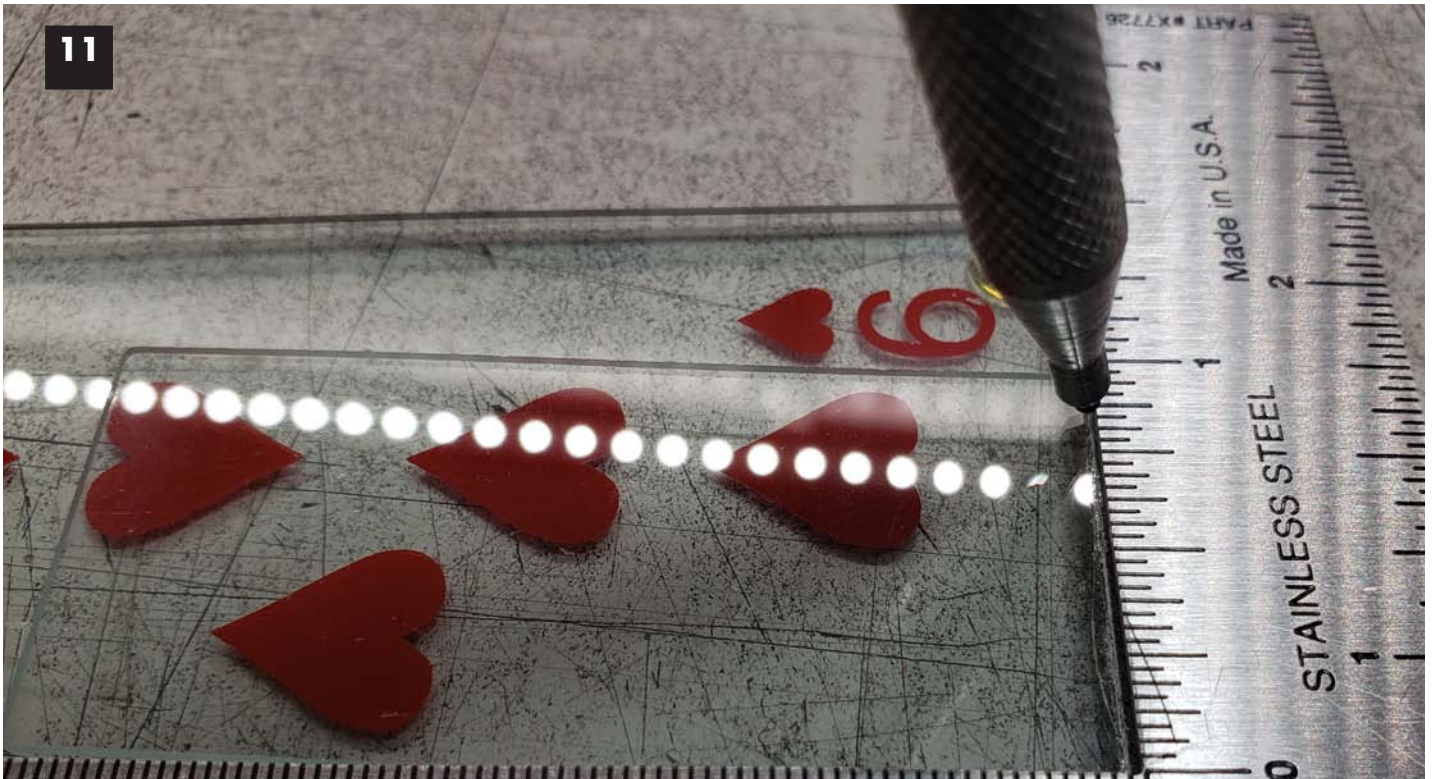


Image 11. The way to cut glass slides to size is score a straight line with a P-B-L carbide scribe. P-B-L also sells slide covers which are very thin pieces of 1" square glass. That is what I usually use for windows instead of slides.



Image 12. Use plastic jaw pliers to snap the slide at the scored line.

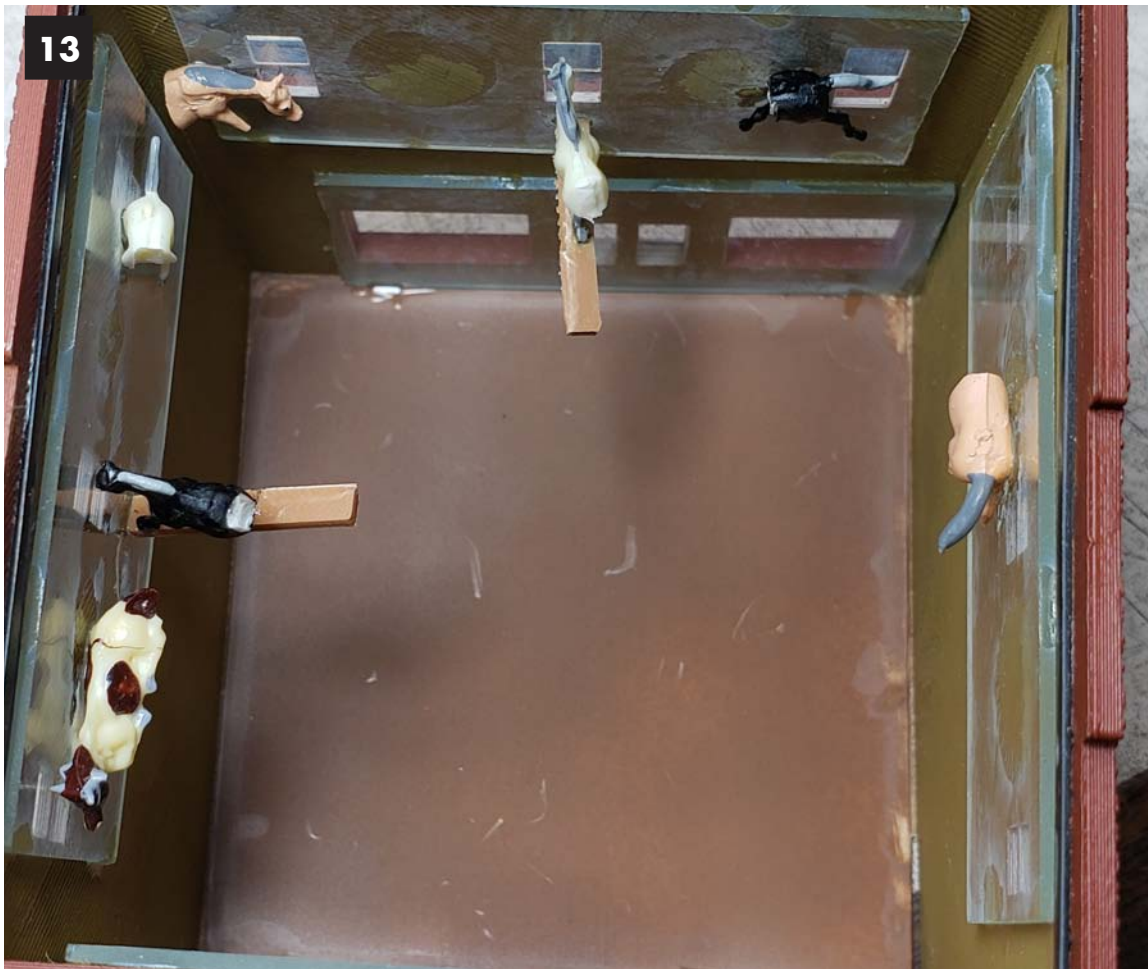


Image 13. As I was trying to figure out what business was going in this building it dawned on me an Aleene's outlet would be a perfect tribute to the glue I've come to favor for many applications. Aleene's is made of Polyvinyl Acetate but for the purpose of this we're going with traditional horse hoofs even though that practice ended a long time ago and was never part of the Aleene's formula. So I decided to have some horses looking forlorn on the second story as they wait to donate their hoofs. To maximize my horse resources I cut each one in half so I could cover two windows per horse. I even let a low quality cow get in the act.



Image 14. Hmmm, what is going on upstairs at Aleene's?

15



Image 15. No disrespect intended but Aleene's needed a slogan to bring in the customer's. Signage is important. The interior looks barren so we'll fix that next.



16

Image 16. An interior was needed. I had an interior detail kit. To give it life I colored the product on the shelves and put signage on the counter.



Image 17. Now it looks like a business of some sort by just adding a counter and product on shelves. Note the doors have some weathering on them to show usage.



Image 18. A couple blocks of styrene painted gray for registers, two file cabinets and a desk helps a lot. Then of course customers. Business is brisk. The guy in the blue suit needs glue to put his head back on.

19



Image 19. Now with the interior detailed it looks pretty good.

20



Image 20. I put fragments of magnets in the corners to hold the building in place when placed on the layout. They are not visible when viewed through the front window so no need to paint them.

21



Image 21. I found the roof was curling up a bit. So the solution was to use magnets to hold it down on each corner. Fragments of magnets were placed in each top corner.



22

Image 22. This is an underside view of the roof. On two corners I placed fragments of magnets. On the other two corners I used a piece of a washer for the magnets to pull on. The half washer at the bottom is to keep the roof fully forward by providing a "stop" so it can't move backwards once placed on the building.

23



Image 23. Some roof detail was needed. After all there are horses and glue manufacturing going on in there. There was a round porthole covered in wood above the left window. I didn't care for that detail so I covered it with an air conditioner. The downspout was colored with a Sharpie. An electric meter was added and a weather vane just for visual interest. Considering this originally was scrap walls just to test gluing technics it turned out great.

24



Image 24. It's hard to figure out why there is a livestock trailer, three 40' trailers and a tank truck at this business. Whatever goes on here must be generating some serious volume. While I didn't use this building as intended by the manufacture I found it to be a great building for a business. I like the way it

went together and the printed detail. You may have noticed the signage change during this project. I was able to acquire vector images of Aleene's logo from the excellent service department at Aleene's. So I used those to make better signage. ▀

KITBASHING

SP FISHBELLY STOCK CARS

By Diane Wolfgram/Images by Author and George Hollwedel

01



Image 01. George's T&NO stock car

As I related in my previous article in the January issue of *N Scale Railroading*, in mid-March 2020, George Hollwedel, a friend of mine who lives in Austin, Texas, asked me to construct some N scale building kits for him. I accepted the challenge and a rather large box containing the kits arrived in the mail a few days later. Along with the building kits were three RSlaserkits kits for 38-foot stock cars which George asked me to try to build to look like stock cars used by the Southern Pacific in the early 1950s

After completing all the building kits and constructing the Common Standard Type 23 Combination Depot that I wrote about

previously, I rummaged back through the box to see what was left and the stock car kits leered up at me from the bottom of it. While I was very tempted to leave them there while working on a remaining commercial warehouse and an oil distributor depot, I decided not to capitulate so soon and opened one kit up to compare the components of it to photos and plans for Southern Pacific stock cars in *Southern Pacific Freight Cars, Volume 1: Gondolas and Stock Cars* by Anthony W. (Tony) Thompson. As it turned out, if I rotated the kit's sides by 180 degrees, they resembled those of old Southern Pacific S-40-2 and S-40-3 stock cars which were the first ones to have steel underframes. Fortunately, these cars had wide fascia boards much like those shown in the photograph.



Image 02: Rotated stock car side. The RSLaserkit sides have 6-foot wide stock loading doors of a design that is quite different from those on Southern Pacific's stock cars, including the S-40-2s and S-40-3s. I figured that I'd just have to use them "as is" and installed them on one of the

cars. George Hollwedel found out that wide Southern Pacific-style doors are available from Voltscooter Engineering, so I ordered the doors and used them on the two remaining cars.



Image 03. Kit door and RSLImage 04. Replacement SP door.

Fortunately, the kit's ends are almost identical to those on the Southern Pacific cars; with the exception of the small end loading doors, which are solid instead of consisting of a frame with steel cross bars to facilitate ventilation. Since the end doors barely show when the cars are coupled, I made no attempt to change them and just installed them "as is".

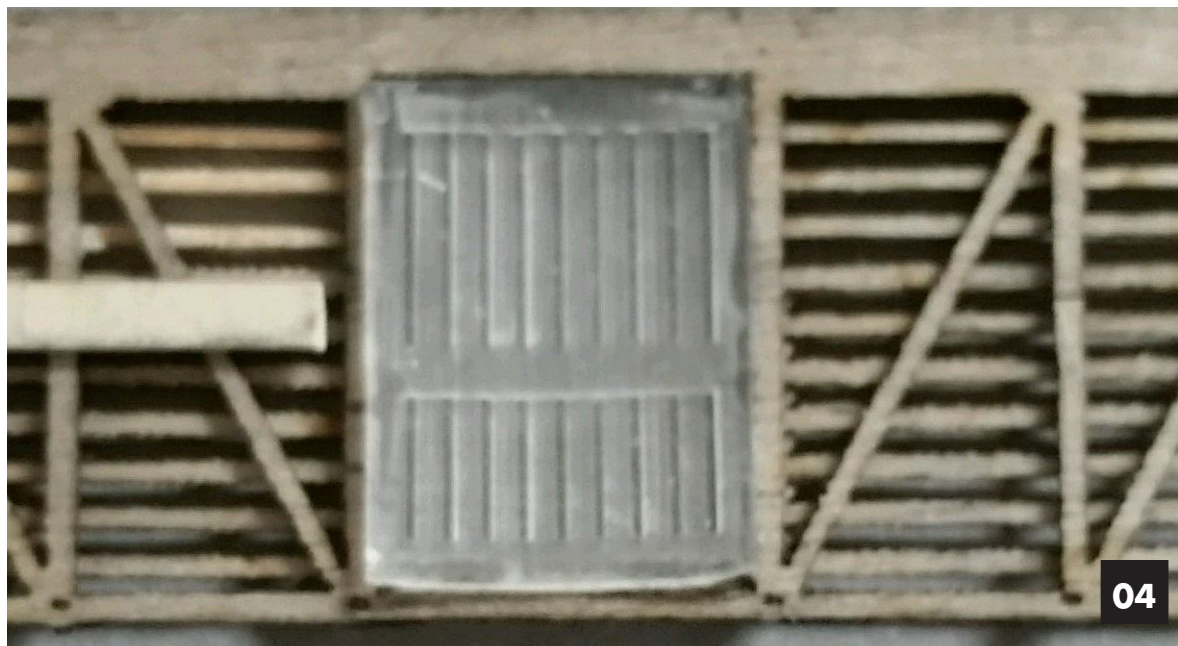




Image 05. I replaced the kits' flat panel roofs with 1/64-inch thick sheet wood scribed at 1/64" intervals to represent Southern Pacific stock car roofs that, interestingly, were interior sheet steel covered with wood to protect them from water and foot wear. I also replaced the kits' laser cut wooden running boards with Micro Trains running boards for their 36-foot cars, which are far more detailed, and used Micro Trains' 36-foot cast-metal car underbodies, which added much needed weight as well.

Details added include ladders from old Intermountain kits that resemble the vertical rows of rungs without rails used on the prototype cars. While I could have tried to follow the prototype, I decided not to because drilling the holes for them would have probably resulted in splitting the thin wooden slats. I added the L-shape grab irons above the ladders, again using parts from old Intermountain kits. The lack of wooden landings is prototypical. I used Micro Trains end stirrups, which were available as parts at the time. I used etched brass grab irons above them that I wedged and glued in place rather than risk splitting the slats by drilling holes for them. The brake wheel platforms are from old Intermountain kits. These and subsequent Southern Pacific Lines S-40-4 stock cars rode on Andrews trucks of a somewhat different design than the N scale ones available from Micro Trains.

Finally, I fabricated the "Fish Belly" side frames using photographs as a reference and attached them below the sides of the car.

I painted the cars using Scalecoat II 2087 Box Car Red #2, which is available in a spray can. I perceive that the color of this blue-base Box Car Red is the same as Star Brand's STR-30 SP/UP Freight Car Red. Both these paints appear to me to have a little less blue in them than does Tru-Color Paint's SP Box Car Red, but that doesn't mean that any of them are wrong because paint was mixed in railroad shops to the satisfaction of the shop's superintendent. Those interested in a little more variation in the colors of their freight cars might also try TCP's Missouri Pacific and Union Pacific versions.

Although the Southern Pacific painted freight car trucks black prior to WWII, they painted them the same color as the car bodies after that war was over according to Anthony (Tony) Thompson. The decals that I used for the car were made expressly for the car series by Richard Brennan's TT-West company and are based on a post war Common Standard stock car lettering diagram reproduced on page 301 of the book that I referenced at the beginning of this article.



Image 06. The cars are loaded with N scale cows, mostly pre-painted plastic imports, but 4 of the cows in each car are pewter ones necessary to bring the car up to weight. I painted these to blend in with the others. ▸

ADDING MTL COUPLERS TO

ATLAS BULKHEAD FLATCARS

By Kim Saign/ Images by author

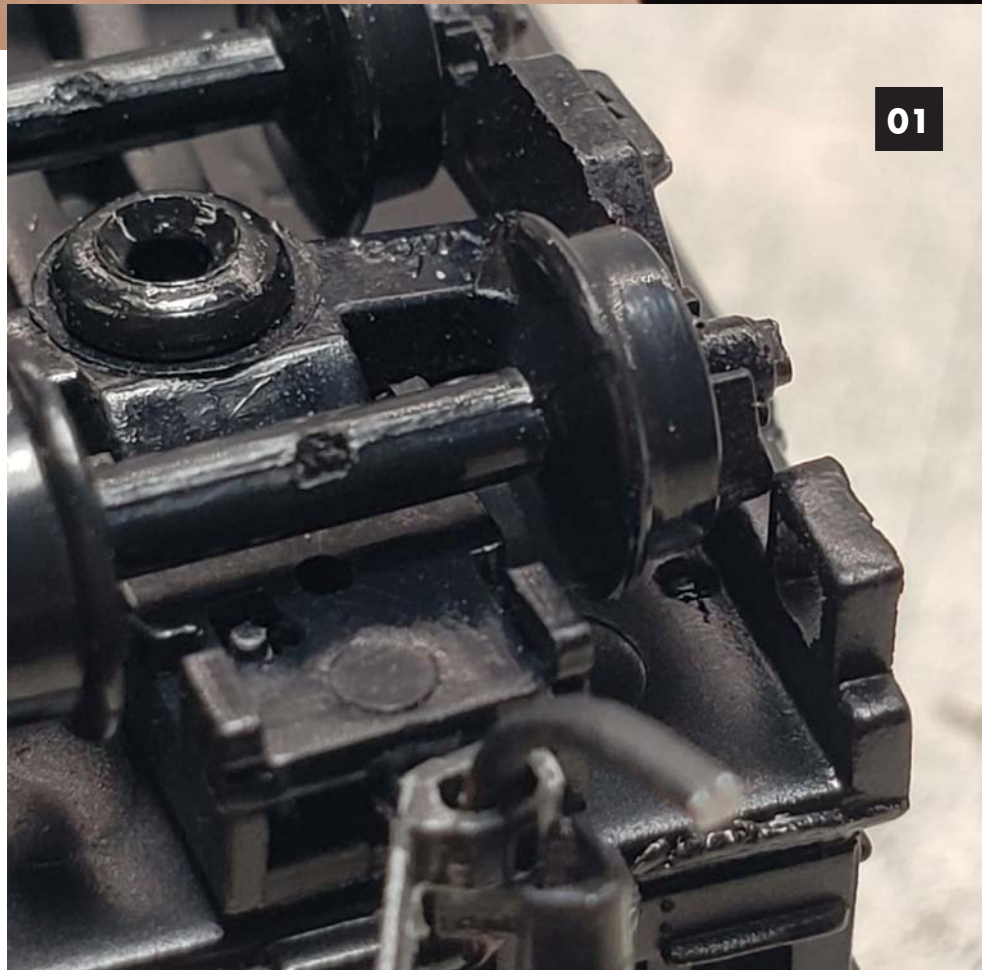


00

Lead image. On my prior layout I was using the Micro Trains 61' bulkhead flats exclusively for hauling lumber. I decided to add a groups of slightly older and shorter bulkhead flat to augment the bulkhead fleet for hauling lumber on my new layout.

Atlas acquired the Walthers flat car and bulkhead flat car tooling from Walthers a few years back. They have since released several nice paint schemes on these cars. Soo Line and Northern Pacific being my favorites. I decided to use this model for a couple reasons. It's 9 scale feet shorter and a prototype that is more in line with my era, 1972.

Initially I just pulled the Atlas trucks off and put Micro Trains 1030 Roller bearing trucks on. I noticed derailments immediately going through turnouts. Upon inspection I saw the stirrups were interfering with the ability of the trucks to swivel. Thus the basis for this article. Follow along as we fix the issues with using Micro Trains trucks on the former Walthers flat cars.



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Image 01. Here we can see the stirrup interfering with the trucks ability to swivel. This wasn't an issue with the original trucks that came on the cars.

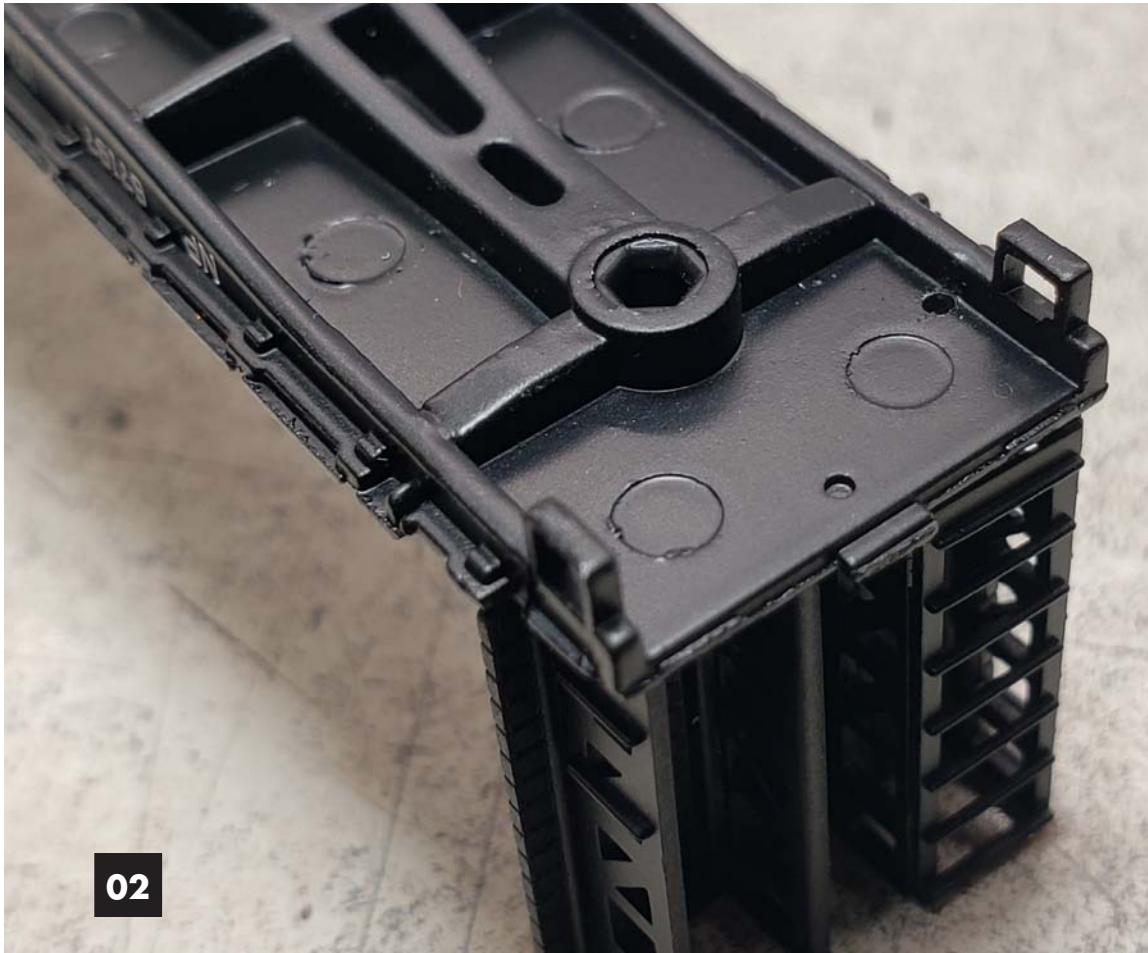


Image 02. With the trucks removed we get a good look at underside of the flatcar. The main flatcar body is all metal. The bulkheads are plastic. So the center of gravity is low on these cars. The stirrups are fairly thick, and sturdy.



Image 03. I used a small file to thin the stirrups. These file down fairly easily. From the front side it still looks unaltered. I did 32 stirrups with no breakage. I do not recommend using a motor tool due to the concern it's easy to grind away too much before you know it.



Image 04. Use a hobby knife to clean up the flash from the filing process. It comes off fairly easy.



Image 05. One of my favorite tools is a Sharpie. Just touch up the filed areas with a Sharpie of the correct color. All the areas filed are normally unseen when the car is on the rails. Weathering will farther help blend the touched up areas.

05



06

Image 06. After putting the Micro Trains trucks back on I was still experiencing derailments going through turnouts. At first glance the trucks were now swiveling OK. But as I rotated them I noticed the coupler moving. The problem was the back end of the coupler was rubbing against the bolster. In image 2 you can see the hole for the bolster is offset towards the center of the car. Thus making the bolster thicker on the coupler side than most bolsters. So the solution is to grind away some of the bolster to prevent the back of the coupler from touching the bolster. I highly recommend using a motor tool for this task.

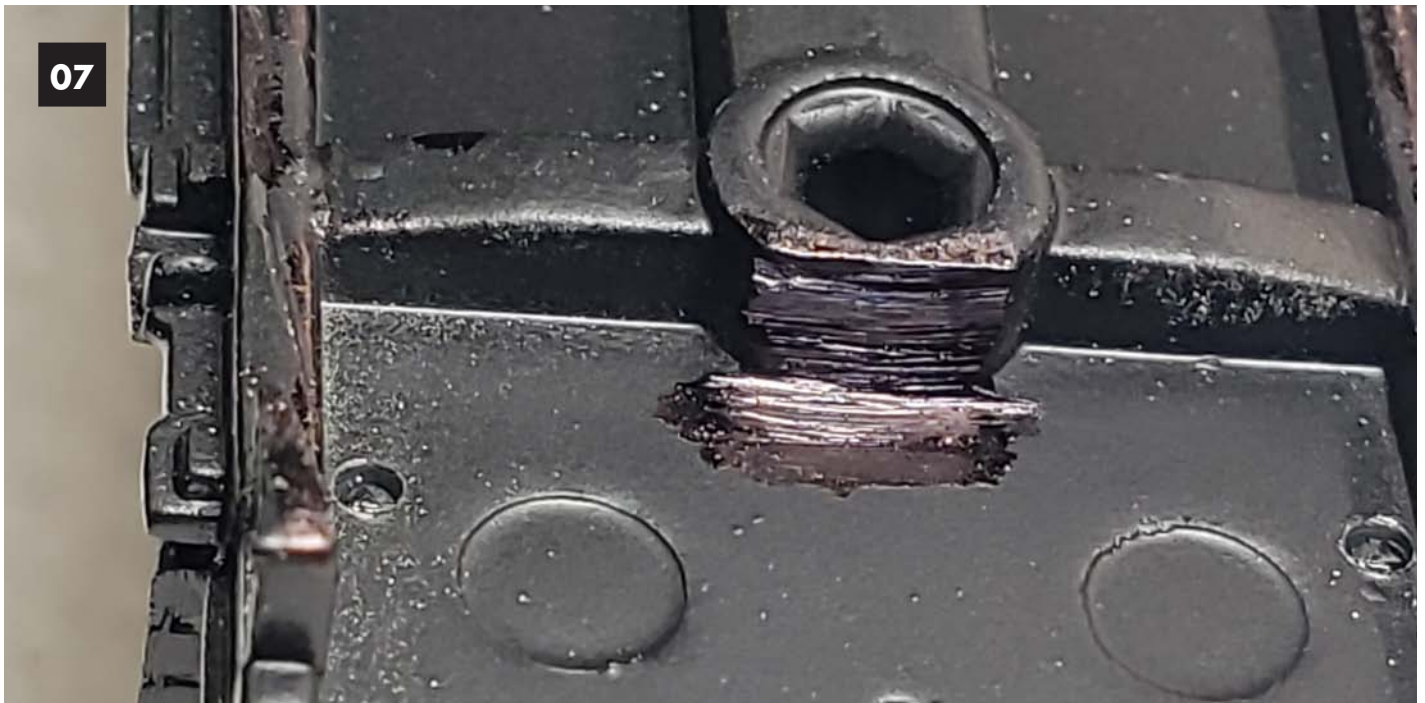


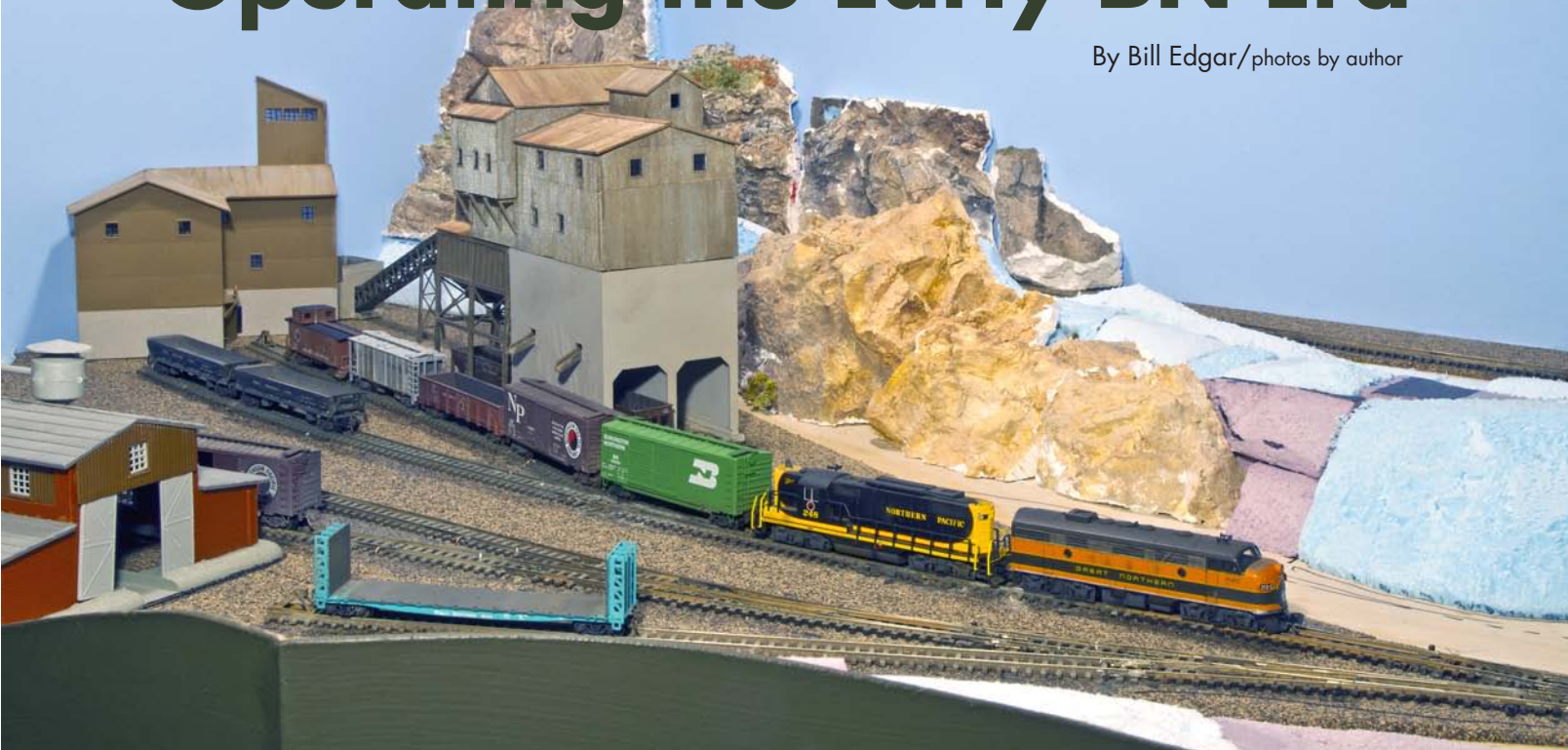
Image 07. Color the ground down area.



Image 08. Now the trucks swivel freely and no longer have derailments. You can see in this image the stirrup no longer interferes with the truck side frames. Visually there are no alterations when viewed from the top or side even though much grinding was actually performed underneath. Now my fleet of these bulkhead flat cars perform flawlessly. ▽

The Wisconsin, Minnesota & Northern System Starting the Scenery & Operating the Early BN Era

By Bill Edgar/photos by author



01 The crew of the Kelly Lake to Swan River Turn (SRT) has completed switching at the lumber mill and quarry and is ready to depart to Keewatin, connect with the mainline at Gunn, then head east to Swan River where it will exchange cars with the Floodwood Turn (FWT) that originated in Grand Rapids. GN 312C and NP 248 are more than enough power for today's local.

The Wisconsin, Minnesota & Northern System was designed for operating my favorite Midwestern railroads. If a railroad served Duluth, Minnesota, it was a favorite of mine. I started with the Milwaukee Road since it has been a favorite since childhood and had not had much of a presence in my last 22 years of modeling in N scale. Operating the Milwaukee Road was featured in NSR No. 125, October 2020. At that time scenery was limited to small test areas around a few bridges (Photos 02, 03). I set up a C&NW operating plan in 2021, and am now operating a plan for early BN or Great Northern. Later I will develop plans for BN/NP, DM&IR, CN, CP, BN/CB&Q, SOO and my fictional North Shore International.

Making the Scenery Base

I began filling the holes in the benchwork starting in January 2021. I went with the pink and blue dense insulation foam, continuing my practice of recycling materials previously gathered or used on my North Shore International layout in Wenatchee, Washington. That layout



02 CNW 4095C leads a freight over a causeway in the middle of the layout. This was where early basic scenery was applied, and the Sculptamold process started here. Rock castings were either glued in place, or simply pressed into the Sculptamold as it was applied. This photo was taken during the C&NW operations in 2021.

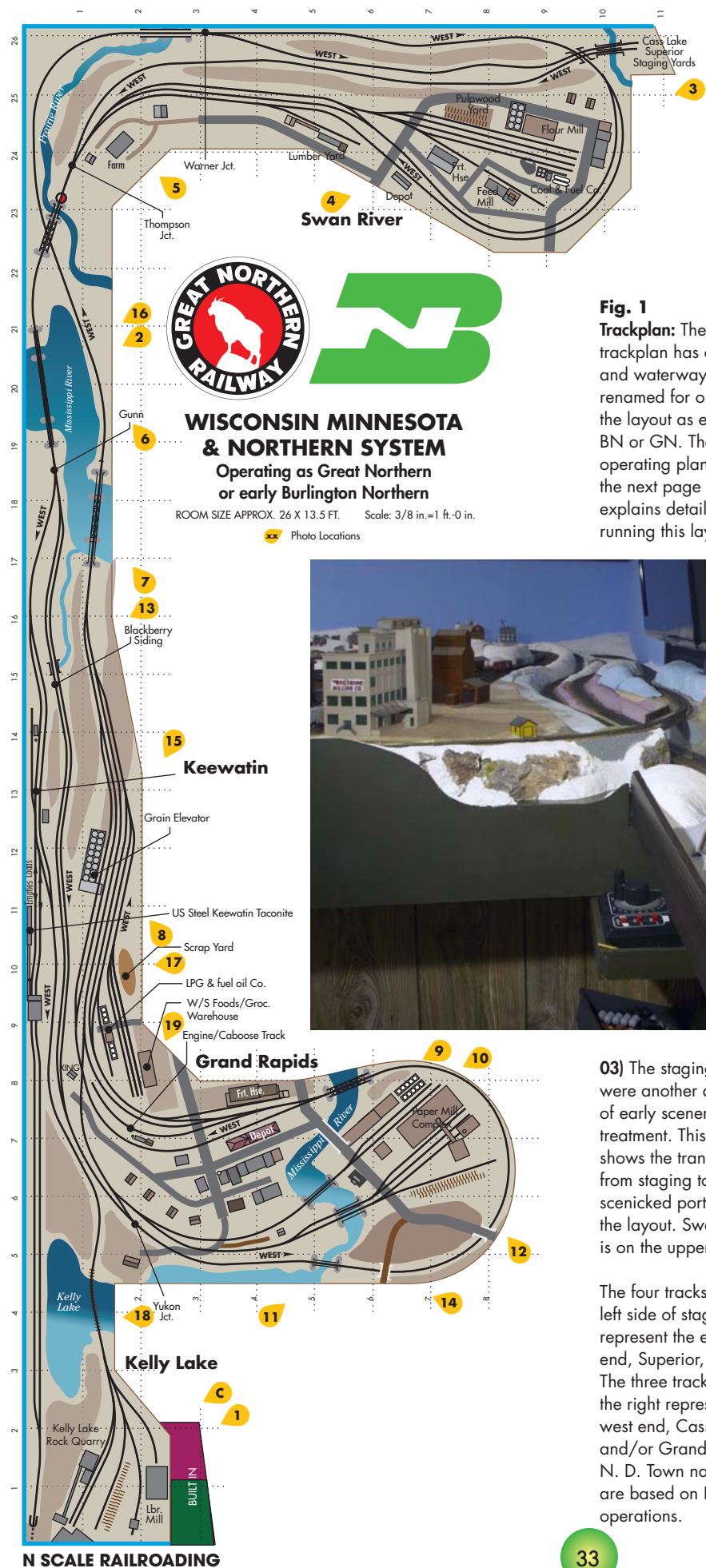


Fig. 1
Trackplan: The trackplan has cities and waterways renamed for operating the layout as either BN or GN. The operating plan on the next page further explains details for running this layout.



03) The staging yards were another area of early scenery treatment. This view shows the transition from staging to the scenicked portion of the layout. Swan River is on the upper left.

The four tracks on the left side of staging represent the east end, Superior, Wis. The three tracks on the right represent the west end, Cass Lake and/or Grand Forks, N. D. Town names are based on BN/GN operations.

was torn down in spring 2018 prior to our move to Wisconsin. I was also able to recycle many of the turnouts and a lot of track as well as buildings, rock castings and hundreds of trees. The photos throughout this article shows DNA from the NSI era.

Foam was installed using Loctite glue which is foam safe and sets up in a few hours. This is slower than my past experience with hot glue, but much neater to work with, and no chance of burns or melting the foam. I was not in a hurry, and foam installation proceeded from January through fall 2021. I was fortunate to have spare scraps of foam and donations from good friends Joe Warner and Steve Fuller, so I did not have to purchase any at inflated building materials pricing.

Most of the foam installation was done during summer months when I could make the messy cuts outdoors. I worked relatively small areas to keep the layout

and family room as neat as possible, and to have the railroad operable throughout the process. With the foam installed, the layout was safe to operate without fear of a derailment ending up on the floor four feet below. I only had one incident where a car left the layout, and it happened to be on the initial run of my New York Central *20th Century Limited*, which sent a car off, fortunately landing on a bookshelf about a foot under the layout, doing no damage. After that, the priority was to fill all holes.

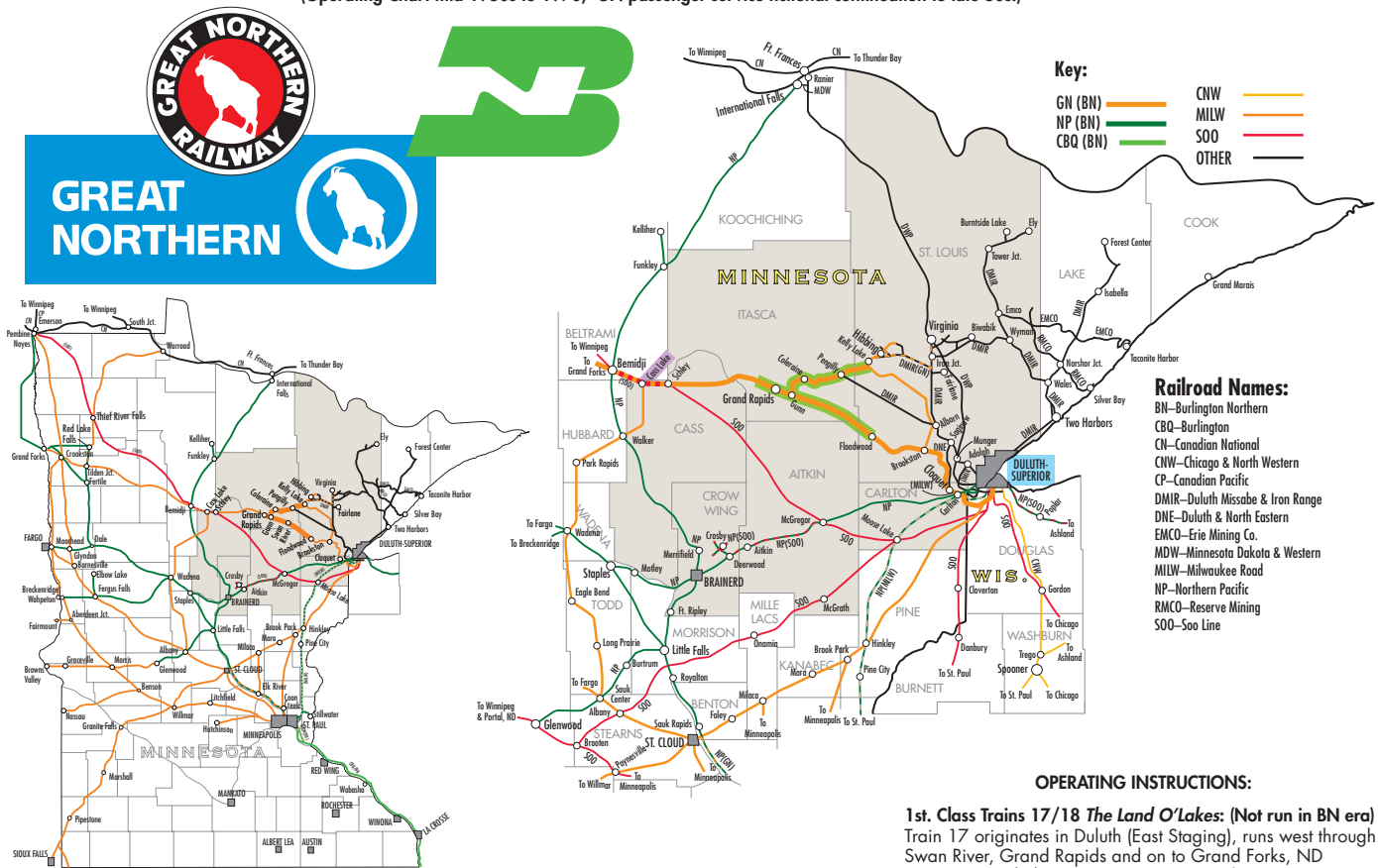
Creating the Terrain

Once the plywood and foam base was installed I began shaping the terrain using Sculptamold. I began in the middle of the layout where I had done a test section (photo 06). The challenge was to create a sense of what the scenery is like in the Upper Midwest. There are hills, but not

Fig. 2

GREAT NORTHERN RY. (BURLINGTON NORTHERN) MISSABE IRON RANGE & NORTHERN MINNESOTA OPERATIONS

(Operating Chart mid 1960s to 1970; GN passenger service fictional continuation to late 60s.)



OPERATING INSTRUCTIONS:

1st. Class Trains 17/18 *The Land O'Lakes*: (Not run in BN era)
 Train 17 originates in Duluth (East Staging), runs west through Swan River, Grand Rapids and on to Grand Forks, ND connecting with the *Western Star*, nos. 27/28. Option to carry a through sleeper to/from Seattle. Trains stop at Swan River & Grand Rapids.

2nd. Class freights 413/414:
 Trains 413 *The Northern States* & 414 *The Great Lakes* handle through traffic between Gavin Yard (Minot) & Superior, WI. They run through the layout normally not doing pickups or setouts.

3rd. Class Trains:
 Trains 405 & 406 handle business between Superior & Cass Lake making pickups & setouts at Grand Rapids. Both trains depart origin terminals Sunday through Thursday, arriving destination terminals Monday through Friday.

Switch Engine Assignments: Grand Rapids

Job SE1 Mon-Fri 7am-5pm:

- 1) Block over night deliveries to local industries & the FWT, due to depart at 930am.
- 2) Switch the elevator and local industries.
- 3) Deliver morning block of inbound cars to the paper mill & pick up outbound cars.
- 4) Block outbound cars for for trains 405 & 406.

Job SE2 Mon-Fri 8am-6pm: Paper mill switcher, handles intra plant moves, prepares outbound cars for am & pm pickups by SE1.

Job SE3 Sun-Fri 7pm-5am:

Cleans up yard, blocking outbound cars for trains 405 & 406. May switch elevator if needed.

Local Assignments: Grand Rapids & Kelly Lake

SRT (Swan River Turn): Mon-Fri 8am-5pm

- 1) Switches industries at Keewatin.
- 2) Heads down Kelly Lake spur to switch industries & pick up outbound loads, prepares outbound cars to put train together.
- 3) Operate to Swan River, setout train, pick up traffic and return to Keewatin.

FWT (Floodwood Turn): Mon-Fri 9am-5pm

- 1) Head east to Swan River, setout cars for the SRT & local industries.
- 2) Continue to Floodwood, setout & pick up cars.
- 3) Return to Swan River & switch industries.
- 4) Pick up SRT cars and outbounds & return to Grand Rapids.

Extra Assignments:

- 1) Ore trains loaded EB/empty WB may operate at any time.
- 2) Grain trains loaded EB/empty WB may operate at any time.

Miles Read Dn	WEST (READ DOWN)			STATIONS			EAST (READ UP)			Miles Read Up	STATIONS			LOCALS			
	1st. Class	2nd. Class	3rd. Class				3rd. Class	2nd. Class	1st. Class								
0	17	413	405	DULUTH SUPERIOR (EAST STAGING)	406	414	18				500	SRT	KELLY LAKE	SRT			
4	Daily	Daily	SUN-FRI					600 am	600 am-2	800 am-2	850 pm	496	830 am	KEEWATIN	400 pm		
73				SWAN RIVER							427						
106				GUNN							394						
109				Ar. GRAND RAPIDS Lv.							391						
109					Lv. GRAND RAPIDS Ar.												
163				CASS LAKE GRAND FORKS GAVIN YARD							337						
295												205					
500												0					



mountains, rivers, lakes, rock outcroppings, forest and farmland. This layout is compromised by the primary goal of operations which includes plenty of switching in a space half the size of my previous layout. The photos show a lot of trackage on this layout, and I hope the scenery combination of cuts, fills and eventually foliage will help reduce the visual impact of all that track.

The Sculptamold process went similar to the foam process, which was to pick an area I wanted to work on, and jump around the layout until it was completed. As Joe Warner would say, "eating the elephant one bite at a time". The basic Sculptamold was started in January 2022 and completed in early March. There will be a bit more work to do as the design for Grand Rapids progresses, probably some time in 2023.

With the Sculptamold in place it is now time to finish the backdrop. I expect to have a partly cloudy, but sunny sky, and the backdrop will include some hills/landscape forms to transition into the 3D portion of the layout. I hope to complete that process through the spring and summer of 2022.

The water locations are currently painted with a dark olive green matching the fascia. This will be changed based on further research, but likely to be shaded in a glossy dark brownish/black, depending on the implied depth of the water. Coatings of gloss acrylic gels will build a sense of transparent depth and waves or ripple effects on the surface. Fiber paste can add rapids or white caps as desired.

04) The village of Swan River is the turning point for both the SRT and FWT locals. The town features mainly agricultural based industries. The brown elevator will not be used and that site will instead house a pulpwood loading yard. There will be a freight warehouse between the train and the feedmill.



05) NP 6012D leads an all NP consist past a farm and Thompson Jct. tower as its train heads west onto the layout from Superior staging. The train will cross the Prairie River and go over the eastbound mainline that comes from Cass Lake/Grand Forks staging. This location creates the basic figure 8 design of the layout.



Photos 05 and 18 show a bit of that effect under the bridge.

Much work remains to be done on the scenery and I look forward to that process. There are at least a couple year's worth of activities ahead at the pace I go.

Operating the BN/GN

Please refer to Figure 1, the Trackplan and Figure 2, the Operating Plan for details on how the railroad operates as either BN or GN. At this writing I am running early BN which is freight only. The timetable in the Operating Plan has a passenger train listed for use in the GN era. Great Northern ran a meager service on their line between Superior and Grand Forks, and it was discontinued before the GN era I typically would operate. Therefore I have freelanced the passenger run by making it a connection between Duluth/Superior and the *Western Star* at Grand Forks or Minot. Great Northern moved their trains around on different routings from time to time, and the *Western Star* might have served Grand Forks at one point, and not at another. My train service would be trains 17 & 18, named *The Land O'Lakes*.

Trains 413/414

Trains 413, *The Northern States* and 414 *The Great Lakes*, were the two primary freights operated by GN and early BN. BN

06) NP 6012D heads train 413 west from Superior while CB&Q 506 leads eastbound train 414 from Cass Lake. The two trains will meet at Blackberry Siding. This photo provides another view of the early scenery test after completion of additional Sculptamold. It's ready for the base color coating at this point, but will have to wait for backdrop painting to be completed.



07) The same trains as in Photo 6 continue their journeys through the bridge area of the layout. The scenery here will separate the two major urban areas of the layout. At some point the snow will melt and this will be a forested area set in late September with touches of fall color on display. The season is appropriate for heavier rail traffic as grain traffic increases from summer levels. Ore trains are running, trying to keep up with demand before the seasonal winter closure of Lake Superior. In this era raw iron ore was still shipped pretty heavily, which created issues with loads freezing in the cars as weather got colder. Modern taconite pellets are like marbles and roll quite freely.

08) CB&Q 506 leads train 414 east through Grand Rapids. GN SD7 no. 563 is assigned yard switching duties at Grand Rapids. The string of cars behind the elevator are on train 413 at Blackberry Siding. Beyond them is Keewatin on the Kelly Lake branch.

changed the numbers, but I am retaining GN numbers for simplicity. They handled through freight between Superior and Minot (Gavin Yard), N. D. They would have a pickup and setout at Cass Lake that would have traffic for Grand Rapids and other areas modeled on the layout.

Trains 405/406

Train 405 handles traffic from Superior west with a setout and pickup at Grand Rapids. Train 406 originates in Cass Lake with a setout and pickup at Grand Rapids. These two trains feed the industries on the layout, passing through Grand Rapids in the middle of the night.

Local Turns SRT/FWT

The Swan River Turn (SRT) originates in Kelly Lake on the branchline that serves Keewatin and the Mesabi Iron Range. It switches Kelly Lake and Keewatin, then heads east to Swan River. At Swan River it sets out its train and picks up traffic for Keewatin and Kelly Lake, then returns to Keewatin to tie up.

The Floodwood Turn (FWT) works from Grand Rapids, heading east to Swan River where it drops cars for the SRT and local industries. It may continue east to Floodwood (Superior staging) where it may pick up pulpwood loads for the mill at Grand Rapids. It switches industries at Swan River, then returns to Grand Rapids and ties up.

Switching Assignments

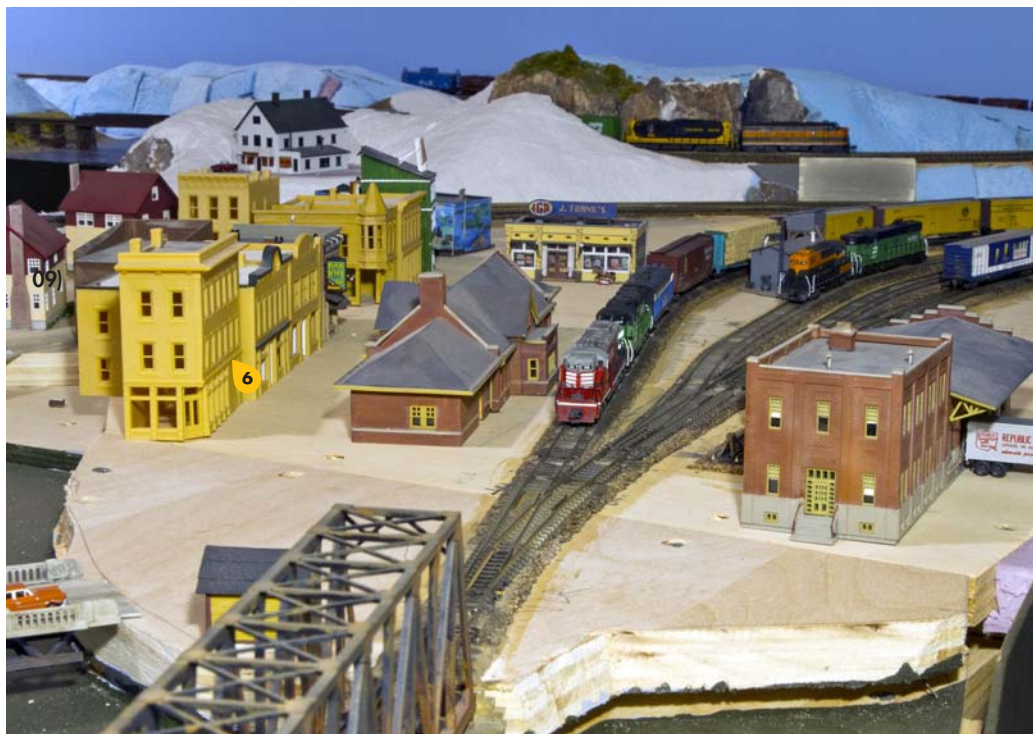
There are three switch engine assignments, all based at Grand Rapids. SE1 handles daytime duties at Grand Rapids yard and local industries. SE2 is based in the paper mill for daytime switching. SE3 handles evening switching supporting trains 405/406 as needed.

Other Operations

Loaded and empty ore extras operate daily between Keewatin and Superior. Additionally seasonal grain traffic may require unit grain trains from time to time.

The early days of operating BN are quite enjoyable and this layout permits an interesting operating opportunity for 1 to 3 people. I look forward to many years of building and operating this layout. More to come as time goes on. ▶

(More photos the next several pages.)



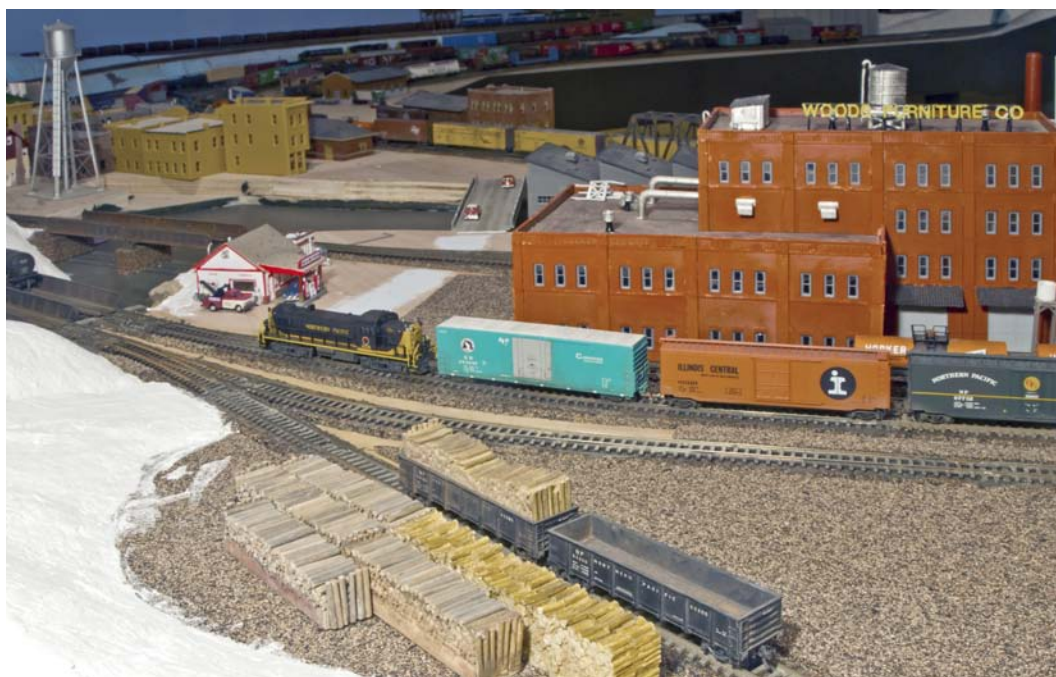
09) CB&Q 506 leads train 414 past Grand Rapids station. Much remains to be done on planning downtown Grand Rapids.

10) NP RS-3 858 is assigned switching duties in the paper mill at Grand Rapids. This mill complex will be the largest industry on the layout other than the iron ore loadout at Keewatin.





11) CB&Q 506 leads train 414 around the paper mill complex at Grand Rapids and heads toward Blackberry Siding for a meet with No. 413. The mill will be assembled from a variety of Walthers factory structures.



12) NP 858 Picks up empty boxcars to spot for loading at the paper mill. The mill is a mix of old and new structures, and has yet to be worked on, thus the "Wood Furniture Co," lettering still applied. The foreground is the pulpwood yard which along with a woodchip unloader feeds the pulp mill adjacent to the paper mill as seen in Photo 11

13) CB&Q 506 has train 414 stopped at Blackberry Siding to meet train 413. Behind the train is Keewatin on the Kelly Lake branch. The foreground trackage is the west end of Grand Rapids.





14) NP 6012D leads train 413 into Grand Rapids on its way west from Superior. Meanwhile NP 858 handles end of day switching chores at the mill, lining up outbound cars for pick up by switch job SE3. They will be added to outbound west and east cars in Grand Rapids yard and picked up in the evening by trains 405 and 406. The scene shows the partially completed Sculptamold work in February 2022.



15) NP 6012D rolls train 413 west through Grand Rapids yard. Switch job SE3 will make a run to the mill for the outbounds after 413 clears.

16) CB&Q 506 has train 414 rolling east crossing the Mississippi River. Gunn Jct. to the Kelly Lake branch is behind the refrigerator cars. NP 6012D is on the causeway westbound.





17) BN 4191, an RS-11, and a GN GP9 and SD9 team up on an ore train loading at Keewatin. Ore trains are more likely to run during the day when scheduled freights are not in the area.

18) GN 312C and NP 248 wrap up switching at Kelly Lake. The trestle across the lake was salvaged from the NSI layout, the only scene saved intact.



19) GN 312C leads the Swan River Turn out of Kelly Lake. Kelly Lake is at the end of a spur requiring a back up move from Keewatin. The loaded ore train is in Keewatin yard, ready to head to Superior, perhaps running ahead of the SRT out of Keewatin.

As with any model railroad one could always wish for more space, more lengthy runs, more staging, etc. With the figure 8 arrangement, operators to run as many laps as desired between stops. The mainline is 2 scale miles, so a run around the room at 30 mph takes 4 minutes. With a little imagination, considering what real crews did to switch cars, this railroad can be run in real time if desired. Or one can set up and run the *20th Century Limited* from New York to Chicago. Model railroading is fun! ▶



TRAVEL GUIDE N EVENTS

2022 MAY 21-22 CA San Pedro.
Belmont Shore Model Railroad Club Spring Open
House. [Click Here.](#)

2022 JUN 14-19 TN Nashville.
28th Annual National N Scale Convention
Registration opens December 06.
<https://www.nationalscaleconvention.com>

2022 SEP 10-11 UK Altoona
2022 International N Gauge Show at Warwick-
shire Event Centre, Nr Leamington Spa
Visit: www.ngaugeshow.co.uk

2022 SEP 16-18 PA Altoona
The 2022 N-Scale Weekend™ at the Blair County
Convention Center. Visit: [HTTPS://WWW.N-
SCALEWEEKEND.COM/ABOUT-THE-SHOW](https://www.n-scaleweekend.com/about-the-show)

2023 JUN ??-?? NV Sparks/ Reno area.
29th Annual National N Scale Convention. ▶

NEWS FROM NSR CONTRIBUTORS



Above left: Looking north. Above right: Looking south. A cool prototype just north of Seattle is the Great Northern's (Now BNSF's) double track Bridge 4 crossing Salmon Bay south of Ballard. Ron Nowka built an operating Bascule bridge with a working counterweight from brass pieces. The track above right that parallels the ship canal is the Northern Pacific's (now Ballard Terminal RR).

SEE YOU NEXT ISSUE!