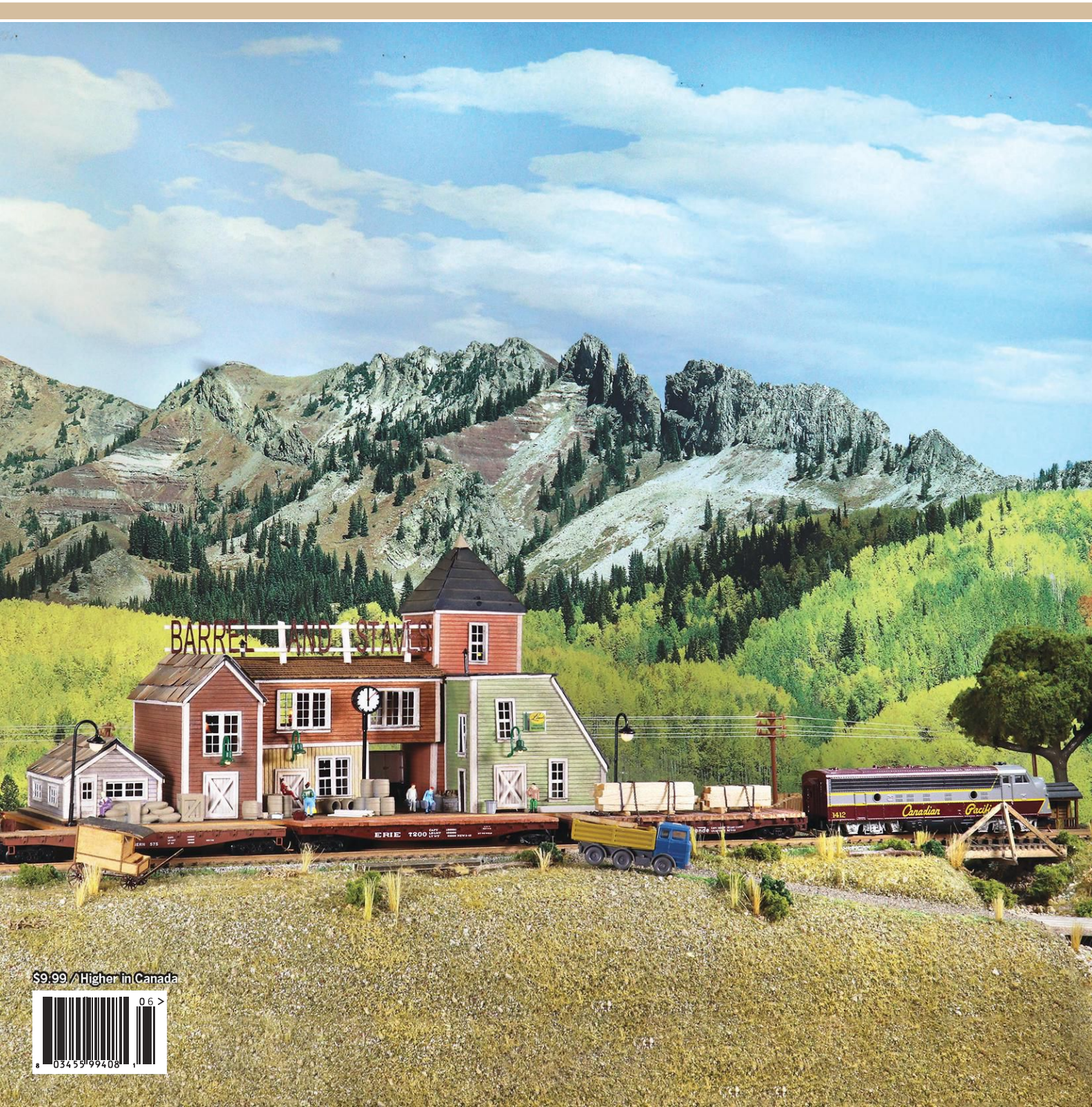
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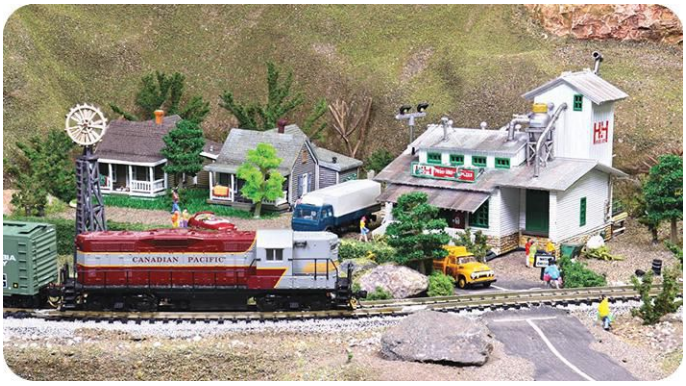
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Volume 38 Number 2
March/April 2026

N-Scale



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On the cover: Business is certainly picking up as the summer wears on and winter is but a heartbeat away. Everyone wants barrels this time of the year. If it's not pickles, then it's wine, or soda crackers, or whatever. In fact, we have so much business this time of the year; the CP added a third local run per week! What would we do without the railroad service right at our door? Join us on Dennis Murphy's Review of Mudd Creek Models' "Barrel and Staves" Kit, starting on page 10.

Want to know more? Wonder what's coming up? Visit us at: www.nscalemagazine.com or contact us at: info@nscalemagazine.com

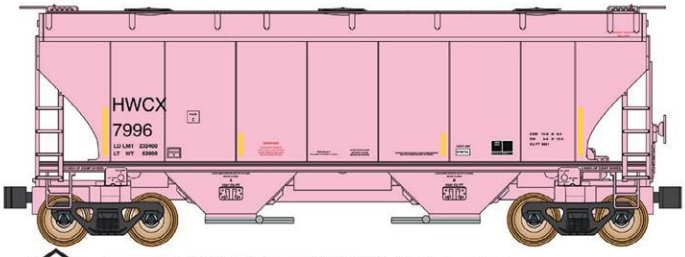
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EDITORIAL

Happy New Year. I hope your new year is starting out on the right track. Here at *N-Scale Magazine*, we are doing great. In 2026, we've already added hundreds of new subscribers to our growing list of N scalers, eager to get started in N scale, building new layouts, structures, adding on to existing layouts, painting and weathering, electronics, DCC, trackwork, sound and lighting, tools, tips and techniques, and the list goes on. We would like to extend a huge thank you and welcome each of you. Hoping 2026 will be the year you begin the layout of your dreams, or pull that existing layout, N scale trucks, cars, engines, and track out of the dusty storage area and get started. Please share your modeling along the way. We'd all love to see what you are working on. And, if you have questions along the way, we're here to help. I'm sure your local hobby shop would also like to help you. Go visit them and ask questions, see what's new and think about joining a club or attending some trains shows and conventions. There is so much out there to see and enjoy.

Many of you have shared photos and details of your new Woodland Scenics' – Scenic Ridge Lightweight Layout Kit. Dennis Murphy will feature Part 5 in this issue. Dennis shares in his own words, "we will be working on the finishing touches, making the town scene and installing things like street lights and traffic signals, and actually set the structures in place we decided on using, and adding vehicles, people, and... and... you get the idea. A hobby is never finished. If you actually finish a hobby, then you need to go off and find another one. So, let's leave this article with the idea that our layout project has moved along nicely. And now? Well, it's time to fine tune the different areas and make them even better. And add more stuff along the way. More is always better in my book." There are over 40 photos, along with captions, to help you succeed. If you have any questions along the way, please reach out to us for help. Please email your photos and let us know how your new layout is coming along: *info@nscalemagazine.com*

You will see in this issue that we have increased the number of pages dedicated to articles. I hope you enjoy the read. There is also a wonderful review by Dennis Murphy on *Mudd Creek Models – Barrel and Staves kit*, I know you will want to see. Their laser cut, wood structures are outstanding. The extra details they include with each kit is exceptional. They also offer custom builds. They are one of many new advertisers that have recently joined us. Please support all of our advertisers and mention you saw their ad in *N-Scale Magazine*. We couldn't do this without all of them. Please look for more new products in New Products Showcase.

N-Scale Magazine will also be attending the United Northwest Model Railroad Show and Marketplace, hosted by the UNW Model Railroad Club, February 21 and 22nd from 10-4 pm each day at the Evergreen State Fairgrounds in Monroe, Washington. Multiple clinics will be held each day, and include extensive model train layouts, workshops and demonstrations, vendors, and more. I hope you will join us, share in the fun, and come by and say hello. We will be handing out free magazines and looking forward to seeing you.

Wishing you all a wonderful 2026.

Pamela

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LETTERS *to the* EDITOR

Hello Pamela: I'm a member of the International Plastic Model Society's, Seattle Chapter, and we have been wrestling with the same issue. Each year, we host a large model contest and have to decide how to handle 3D printed kits.

Afraid, in our case, it's a little easier. We focus on form (does it look like what it is supposed to be), fit (are there gaps, seams, etc., where there shouldn't be), and finish (is the paint and weathering consistent and correct for the subject (a car, flat for a tank). Only after a model passes three criteria do we get into the weeds of craftsmanship and such.

In the case of model railroaders, (I am also an avid N scaler) we tend to place a higher value on craftsmanship than the three F's above. That said, in my opinion, I think we're "stuck" with having to separate categories. One for traditional and one for 3D printed models.

Another argument for separating the two methods is that the individuals are very different. A traditional modeler is good with their hands in creating something from random pieces. A 3D modeler is good with their brain in being able to use a computer program to design as exact a replica of a piece of equipment or structure as possible. Pitting these two groups against one another is like having a baseball team playing a football team. Both are good in their own sport, but abilities don't translate across very well.

So, this is just one man's opinion. I'm sure you'll receive many more over the next few months.

Thomas Knapp, good modeling and thanks for your regular column..

Sincerely,

Chris Martin

Good afternoon Pam: I wanted to respond to the Letters to the Editor column in the September/October 2025 issue.

You were seeking a poll on whether Dave Dahlstrom should publish an article on modeling a Coast Guard boat. Although you have already rendered your opinion on this – a resounding yes – you wanted to know if the rest of the subscribers shared your feelings. To which I say, bring it on. I think any modeling subject devoted to N scale, be it structures, locos, rolling stock, vehicles, and or marine activity, should be published. Just like in other scales, not everyone models a harbor, but it's always interesting to read how one modeler modeled that specific subject. So yes, Dave should absolutely write his article and I hope to read it in a future issue of *N-Scale Magazine*.

To answer Lars Anderson's somewhat rhetorical request, *N-Scale Magazine* has published plenty of articles devoted to the 1800s and early 1900s, involving everything steam, and still does so, whenever such an article presents itself. A few years back, there was an article on a beautiful Civil War themed layout. It even made it to the cover page. Tom Knapp's articles are pretty much all about steam. Granted, they are specific to Narrow Guage, but steam non the less. His are great how-to articles.

No hobby magazine of late has devoted itself to any specific subject. Any that did, are unfortunately no longer published.

All the best,

Michael Kaplan

Hello Pamela: Can you please offer advice to me pertaining to transformers? Over many years, I have collected all sorts of N scale engines; cars; cabooses, etc. Is there a generic transformer I can buy to use? I also have six N scale train sets, but only one (Tomix from 1990 or so) includes a transformer. Recently retired, I'm trying to build a layout; I am just not sure if I can combine different tracks and have it run on a 'super' transformer. Any suggestions would be overly kind.

Pete from CT

Response from Dennis Murphy: Hello from Olympia. THANKS for the question, I am certain you are not the only one thinking about this. First off, are you thinking of sticking with only DC power? Or are you thinking of DCC? Or are you thinking of... BOTH?

If you are thinking of using only DC power, unless you want to be running ALL of your locomotives at once, go for one of the fine NEWER powerpacks on the market (NOT the "older" units still on the market). If you want to run ALL your locomotives at the same time, purchase one of the NEWER more expensive models. I found I did NOT ever use all the "fancy extra" functions that some of the "top end" powerpacks offer. And on the other end of the spectrum, if you are planning on running only one locomotive "around and round" while having a "liquid libation of your choice" (as I often do), then the cheap powerpacks that are included in some of the "train sets' should take care of your needs.

Note: The cheap power packs will run your locomotive FAST, but not slow. You spent the extra $$ to get real-life operation. As for DCC, be watching our favorite magazine for a little sidebar article on how to set your layout up to switch from DC to DCC "on the fly."

THANKS for the question.

Hello Pamela: Happy New Year! I was reading through the wonderful September/October 2025 issue of *N-Scale Magazine*, specifically an article by John Magine and his beautiful, and realistic looking layout. And there is something that caught my attention that I did not seem to notice the first few times I looked through all the pictures. I guess that's how good the scenery is. Anyways, so, he modeled a small body of water with fishing boats and fisheries and all the bridges crossing it, but taking in the larger picture, one might realize that the body of water seems landlocked.

That little fishing boat has no way out and as such got locked in further by all the little bridges that show no signs of being movable. The easiest way to fix that would be to just remove that little boat. It's a bit too large for the modeled space anyway. John can always represent water activity via row boats. If he still wants to represent a busy fishing channel, then it may get a bit more involved by replacing all those bridges with movable spans. Either a double lift or double bascule bridge would be for the railroad, and a single lift-up span for that wooden road bridge. It's a lot more work for sure, but if accomplished correctly, would certainly give the layout that added "WOW" factor. And that waterfall would need to go as well.

Sincerely,

Michael Kaplan

We look forward to hearing your comments. Please submit them to: N-Scale Magazine • 5811 75th Avenue NE • Marysville, WA 98270
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Review: Mudd Creek Models

"Barrel and Staves" Kit – Something Entirely New

by **Dennis Murphy**



CONGRATULATIONS, you're all done. We hope you have enjoyed building this kit as much as we have enjoyed bringing it to you.
As this is our Christmas 2022 kit, we want to wish you and your families and awesome holiday season.

Thanks again, Frank and Natalie

Photo 1: Here is a photo of what the finished project "should" look like. As for mine, only time will tell.



Photo 2: Here is a look at the information on the packaging. This looks to be a fun build. Something brand new. What good fun.

Thank you for purchasing from Mudd Creek Models. We are a small company of only two people and from time to time make mistakes. If you see something that is wrong or missing please let us know so we can correct it. We will always reply to emails and pick up the phone for you.
Email is: muddcreekmodels@icloud.com
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Photo 3: Mudd Creek Models is truly the definition of a "Ma-And-Pa" operation. They really care that you have fun with their kits. That, by itself, is enough to get me to purchase more of their products.

All right! At this moment, I'm all a twitter with the holiday spirit, even though by the time you read this review, about the only bit of the holidays remaining will be the "left-over credit card balance." But for now, it's all good fun.

And, so what am I talking about here? Well, I'm talking about a brand new "Craftsman Style" laser-cut, wood structure kit. In fact, it's a limited-run production specially offered as a holiday special. It's called the "Barrel and Staves" kit. (Christmas Kit #2022 - Part #MCM-018) offered by the nice folks at the Mudd Creek Models Company. Wow, a special holiday treat! (All I want for Christmas is my Mudd Creek Models kit.)

What I found when this fun kit arrived at my doorstep was a very nicely made and well thought out package. Not only are the parts very well cut out, but it also comes with a bunch of "extras" to fill out your scene. And if nothing else, you will be the only one of your modeling buddies that will have one of these beauties.

What Mudd Creek Models has done is taken five small structures and worked them into a single business. To be honest, if I had not known better, I would have thought this was a Bar Mills offering (I just love those guys!). This kit looks easy enough that most modelers that have other kits like this under their belt should have no problems with construction. And it looks difficult enough to keep the rest of us entertained.

These five little structures are your basic "box" construction, with corner posts that hold the walls together. They give you really nice, multi-part windows and doors, and for those that really want them, they also include window glazing. (I admit, I don't always install the glazing, as it sometimes produces glare when taking photos.)

Please keep in mind that this is a "Craftsman Style" kit. So, what does that actually mean? For one thing,

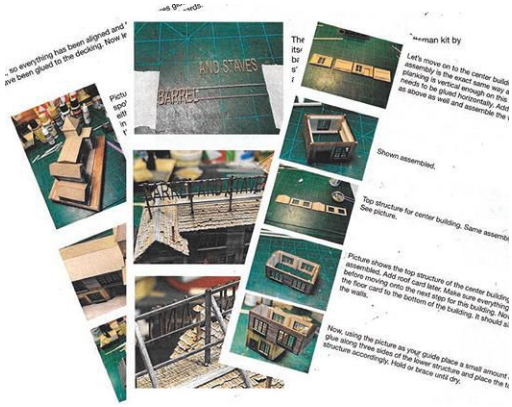


Photo 4: Have a look at some of the directions. Please remember that this is truly a "craftsman style" kit, which means much of the construction is entirely up to the whims of the modeler building the kit. If you like the "put this bit on that part" type of directions, then this kit might be a stretch for you. As my wonderful wife says, "This type of project is Modeling by Dennis."



Photo 5: All right, here we go. Here are the five small structure parts in their individual packaging. I suggest leaving the parts in their bags until it's time to work on them. Less chance of mixing things up.



Photo 6 (*Left*): And now for a little coloring. I like to use my weathering powders to color these laser-cut wood kits. These powders give you a nice consistently, inconsistent coloring, very much like in real life. Keep in mind that these powders work very poorly on plastic or metal. If you are not careful, this stuff will get all over the place. The "white" powder is the worst. (There it is again, the old "voice of experience.")



Photo 7: Well, here you have it. Everything all ready to go. I guess it must be time to break out the glue. The only problem now is where to start.

there is a lot of "modeling by you." If you prefer detailed instructions that state, "Put this bit onto that part, and then you," then this kit might be a bit of a stretch for you. As my wonderful wife is known to say, "Modeling by Dennis."

As for the coloring, with these very nice laser-cut kits, I like to use my dry weathering powder. They are fast, as there is no drying time, they never ever cause the wood to warp, there are a number of colors (and if you apply two different colors in succession, you can produce even some different color effect), and they are fun to work with.

One caution note on weathering powders: They can and will get all over the place if you're not careful. (The white is the worst with making a mess.) Make sure to wash your hands between changing your color selection, and keep those grubby fingers away from cross contaminating other parts. And either use a different brush for different colors, or wash the brush to



Photo 8: Start out by installing the corner posts. Make sure to really take your time and get these corner units exactly flush to the outside of the wall. If you don't get these correct, you will see them that way forever.



Photo 9: Every good "Craftsman Style" kit comes with very fine wall material, which means the wall sections will warp easily (especially if you paint or stain them). To fix that possibility, simply glue on some of the provided backing. And, of course, allow the glue to dry before you start messing about with the wall sections.



Photo 10: It must be time to install the multi-part windows and doors. This chore really isn't "difficult" at all, but it is a bit tedious and time consuming.

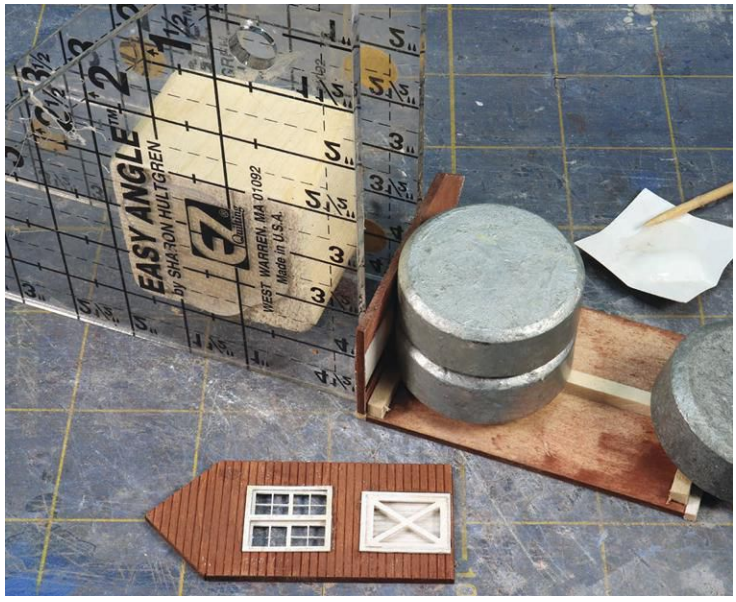


Photo 11: As you start to assemble these small structures, make sure everything is square and plumb. If you make one section a bit off, there will be no going back to fix it later.



Photo 12: It must be time for the sub-roofing. Evenly space the edges, then weight it down until the glue dries.



Photo 13: We are moving along nicely. So, now is the time to decide on which one of the three different types of roofing to use on which of the little structures. You can use any of the three roofing materials as you please. Note the bottle of Hob-e-Tec glue. This stuff is great for attaching dissimilar materials (like the metal and paper in this application). But watch out: Read and follow the directions carefully.



Photo 14: In this case, I decided on the metal roofing to start with. I cut the material into strips, then snip-snip-snip into realistic bits of metal sheeting. Then place them on one at a time. Don't worry about the edges, as you can come back later and nip-off the excess bits.



Photo 15: Of course, make sure to have plenty of "handy-helpers" at your fingertips for holding things in place while the glue dries. (You can never have too many Handy-Helpers at the ready.)

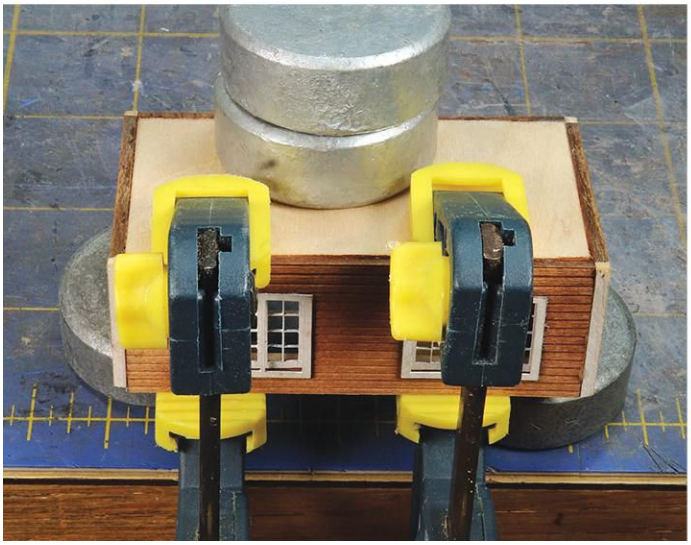


Photo 16: Here is one of the more difficult applications of handy helpers "hard at work" while the glue was drying. Sometimes you need to get creative when holding parts together while the glue dries. What good fun.

remove any excess powder.

Let's see... Humm, what else? Oh yes, the kit also includes wood to be used as wall backing. This reinforcement is most important if you plan on using either paint or stain, as these thin wall panels have a tendency to warp when liquids are used on them.

And what about the roofing? All I can say is... COOL! The nice folks at Mudd Creek Models give you three different roofing choices to use as you see fit. Now that's good fun (if you ask me). To attach dissimilar materials (like the sub roofing and roofing materials), I find the "Hob-e-Tac" adhesive works great. Yes, granted you actually need to read the directions if you want this stuff to work correctly, but it works so well, that it's worth the extra effort.

As you can see by the photos included, I went way-out with the lighting. (Why not. It's the holidays.) This is, of course, your choice. But I had all the stuff already on-hand, and not much else at the moment to entertain myself. And it is a hobby after all.

After adding all the included "extras," and some of my own I had on-hand, this project really came out great. This kit took me about 20 hours to complete, not including drying time for adhesives. If I were to rate the difficulty of this



Photo 17: This photo doesn't do this item justice. What you are looking at here is a great big sheet of sandpaper stuck to a board. I don't remember where this came from, but it works great to level up all kinds of things. If you find one of these, purchase it.



Photo 18: OK, a bit about my philosophy of model building. Many of my modeling buddies want an end product that is all worn out and used up. Not me. I'm shooting for the "well used, but still very serviceable" look. To obtain that look with the metal roofing, I use a product called "Rust All." Of course, a little goes a long way, so be conservative when starting this process. You can always add more later if you wish.



Photo 19: All right, let's try a different roofing material on one of the other small structures. I really liked the way these shingles came out. (I wonder if I might purchase just some the singles for use later?) Nice... Really nice. What good fun.

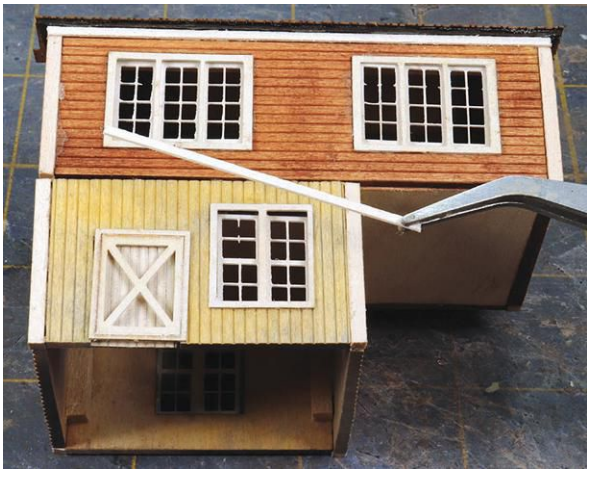
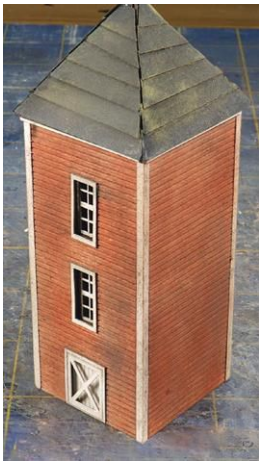


Photo 20: Now that we are moving right along, it must be time to add a bit of trim here, and a bit more trim over there. This is a great way to cover up any... Ummm, what should I call them: "Not exactly correct" joining of things. Not too much glue though.



Photo 21: Here you have a look at the three different types of roofing included in this project. Wow, that's a sign of a really great kit (if you ask me, anyway). And remember, you can place any of the roofing on any of the structures you wish. Your choice.







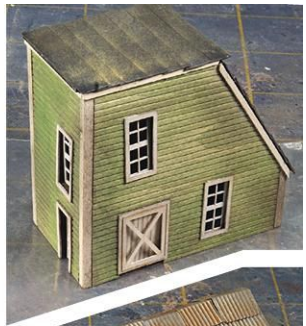




Photo 22: Here is a look at the five different structures all finished and ready to be put together. I find it interesting how Mudd Creek Models was able to take a bunch of odd-lot items and make them fit together so well into one "new" project. Thanks folks.



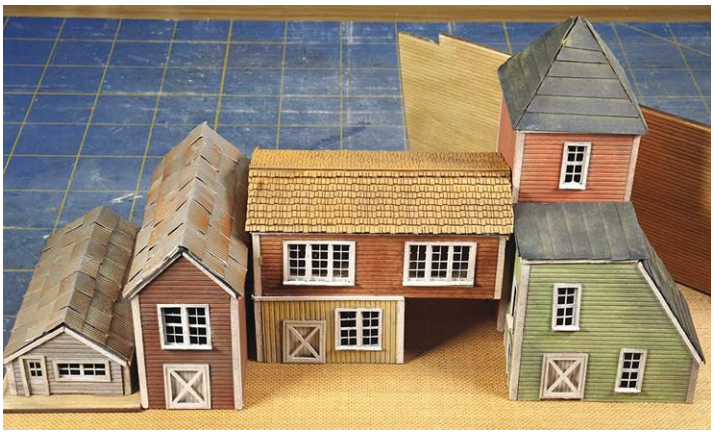


Photo 23: (*Above*): I did run into one little problem I would like to fill you in on. There is an included "base" section of wood, but I just couldn't get the buildings to fit as Mudd Creek Models wanted them to (And I really did try!). As my wonderful wife always says, "It's a hobby, NOT a job." So, I messed around in my treasure chest (mostly junk, with a few jewels mixed in for good measure) and found a new section of wood, a bit larger than what was provided in the kit. Problem solved. (*Right*): Here I am in the planning stages, making sure everything will work out as my mental image has it set up. Also note that I raised the platform a bit so I can have the finished project as a trackside business, rather than flat at ground level. Easy-Pezy.

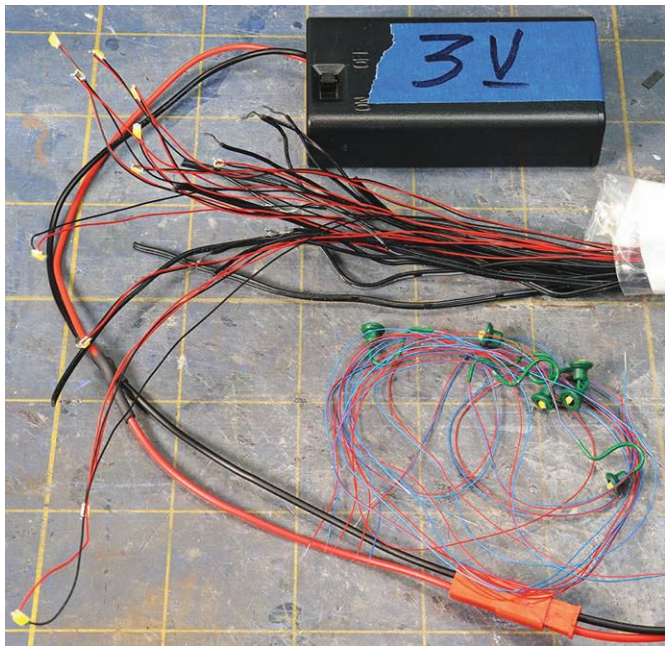


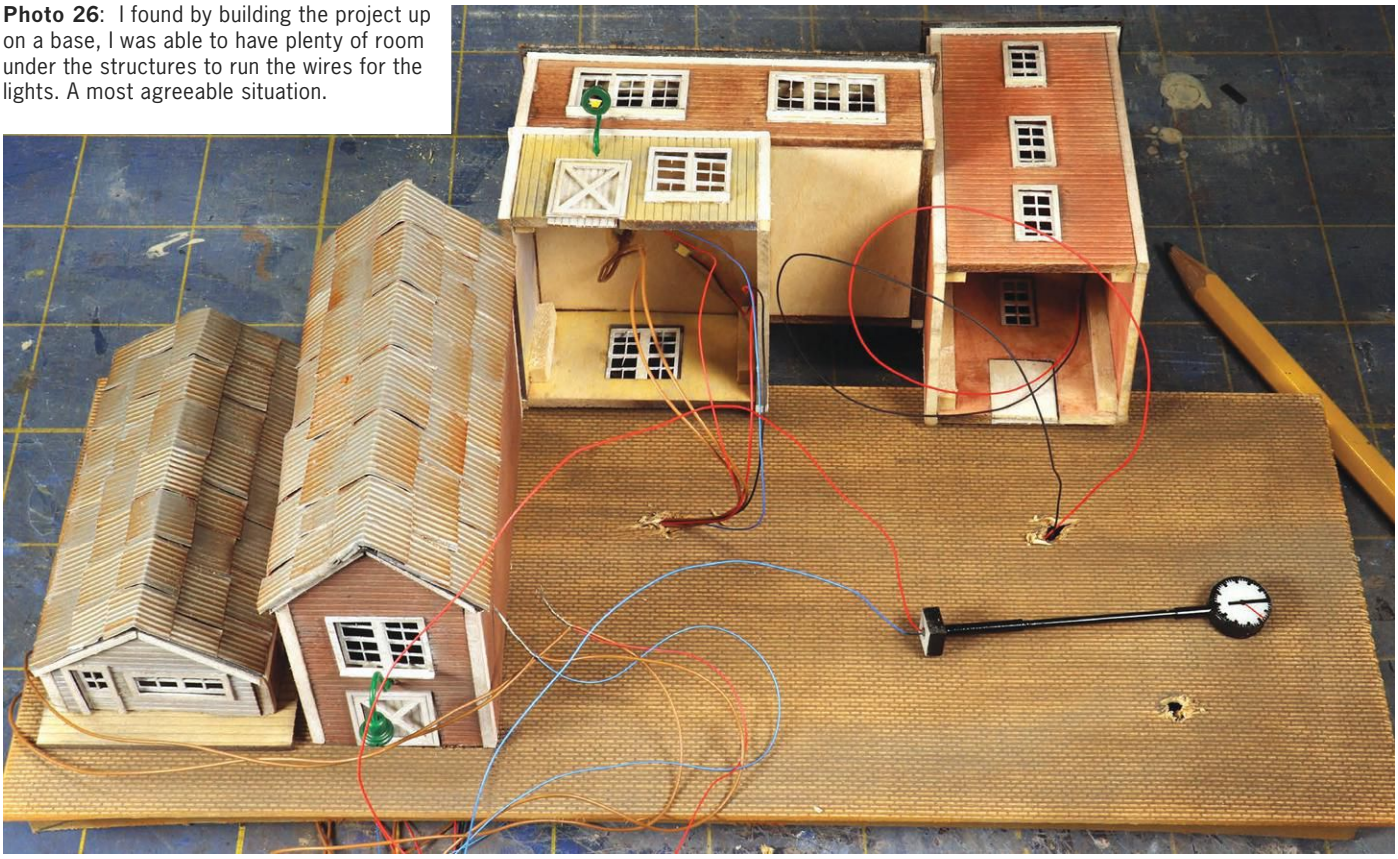
Photo 24: Well, let's see here. What might be next? As has been said many times in the past, "Let There Be LIGHT" (And there was). I have a bunch of lighting stuff on hand, so I will load up this project. All of these bulbs are 3V, so I can run them on batteries. And being LED, the batteries should run for a month (or longer).

project, I would say it's about at the middle to higher end of intermediate. Not so difficult for those of you that have built other laser-cut kits, but certainly difficult enough to keep the rest of us entertained.



Photo 25: Lights are installed, so it must be time to start setting the structures into place. I might add that the footprint of structures is really only a suggestion. You can, upon your choice, place these structures in any order that catches your fancy. (Wow, something completely different.)

Photo 26: I found by building the project up on a base, I was able to have plenty of room under the structures to run the wires for the lights. A most agreeable situation.



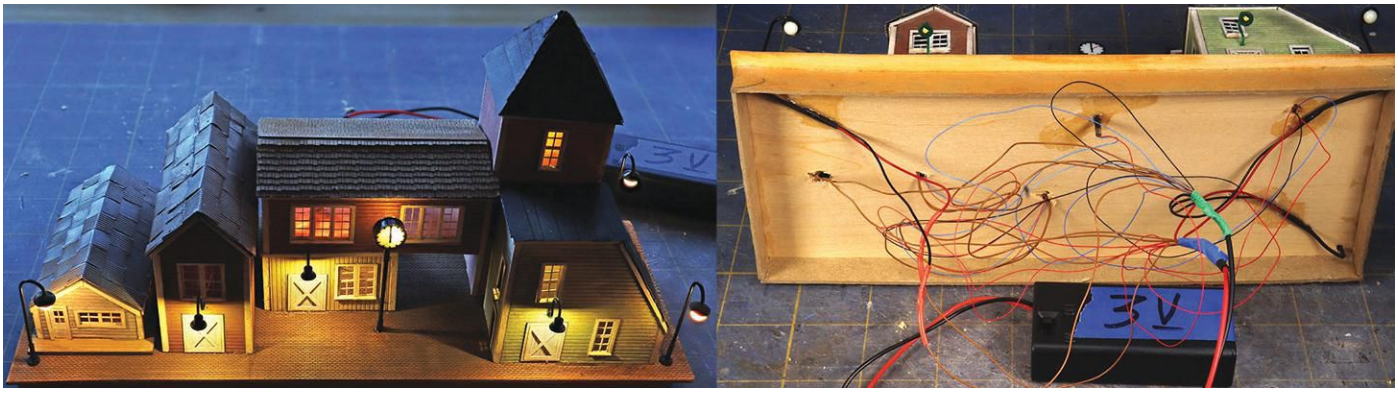


Photo 27: What a mess. Look at all those wires running all over the place. So, what do you think? Will all the lights actually work when I finish the hook-ups? Only time will tell.





Photo 28: Oh no, I almost forgot the roof sign. (I don't want to forget that important item.) And with the addition of the sign, we are just about finished. What do you think? Without any doubt, this was a fun project.

Photo 29 (*Left*): Oh yes, don't forget about all the included extras. I just love this phase of construction. (This can go here, and that can go over there. No, that doesn't fit there.) You get the idea.









Photo 30: Here is a good look at all the sides of our project. Boy, this project came out really well. And just think of how much fun you can have building your very own Mudd Creek Models kit. Go have a look at what they offer, and you might well find yourself at your workbench working away, sometime SOON!



Photo 31 (*Left & Below*): A couple of nice shots highlighting the lighting. What good fun!



So, go have a look around the Mud Creek Models Company web pages and find something to fill your time. And keep in mind that, what I hear is Mudd Creek Models will be offering a NEW KIT every Holiday season. Cool... Now that's a holiday present I will be certainly looking forward to.

Have fun, and... Ummm... A "belated" Happy Holidays!

YOU'RE IN THE ARMY NOW



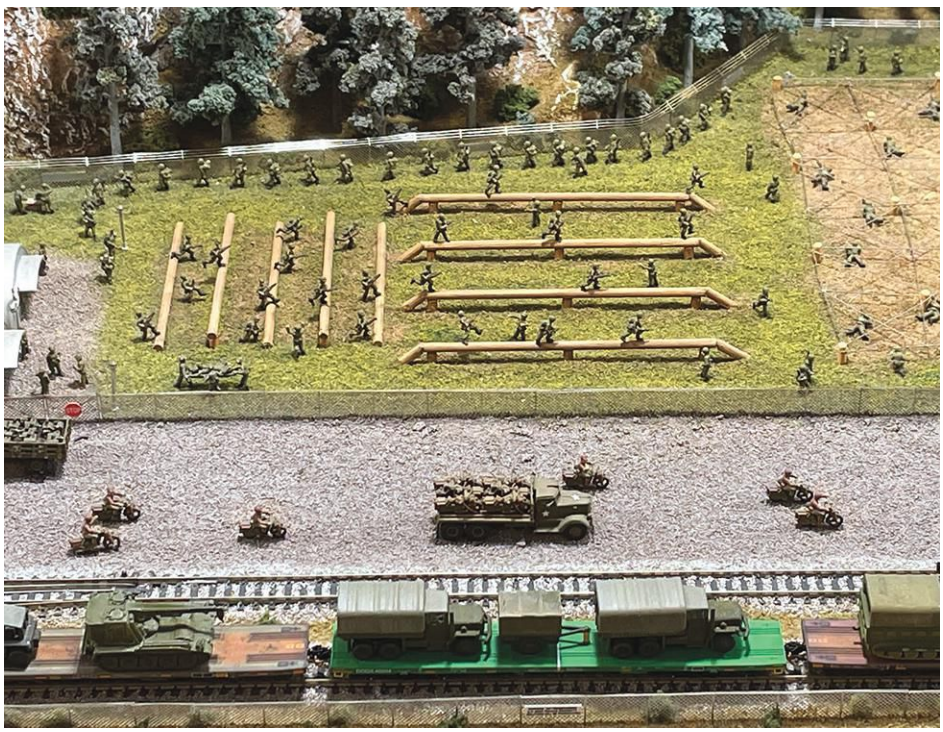
Part 2

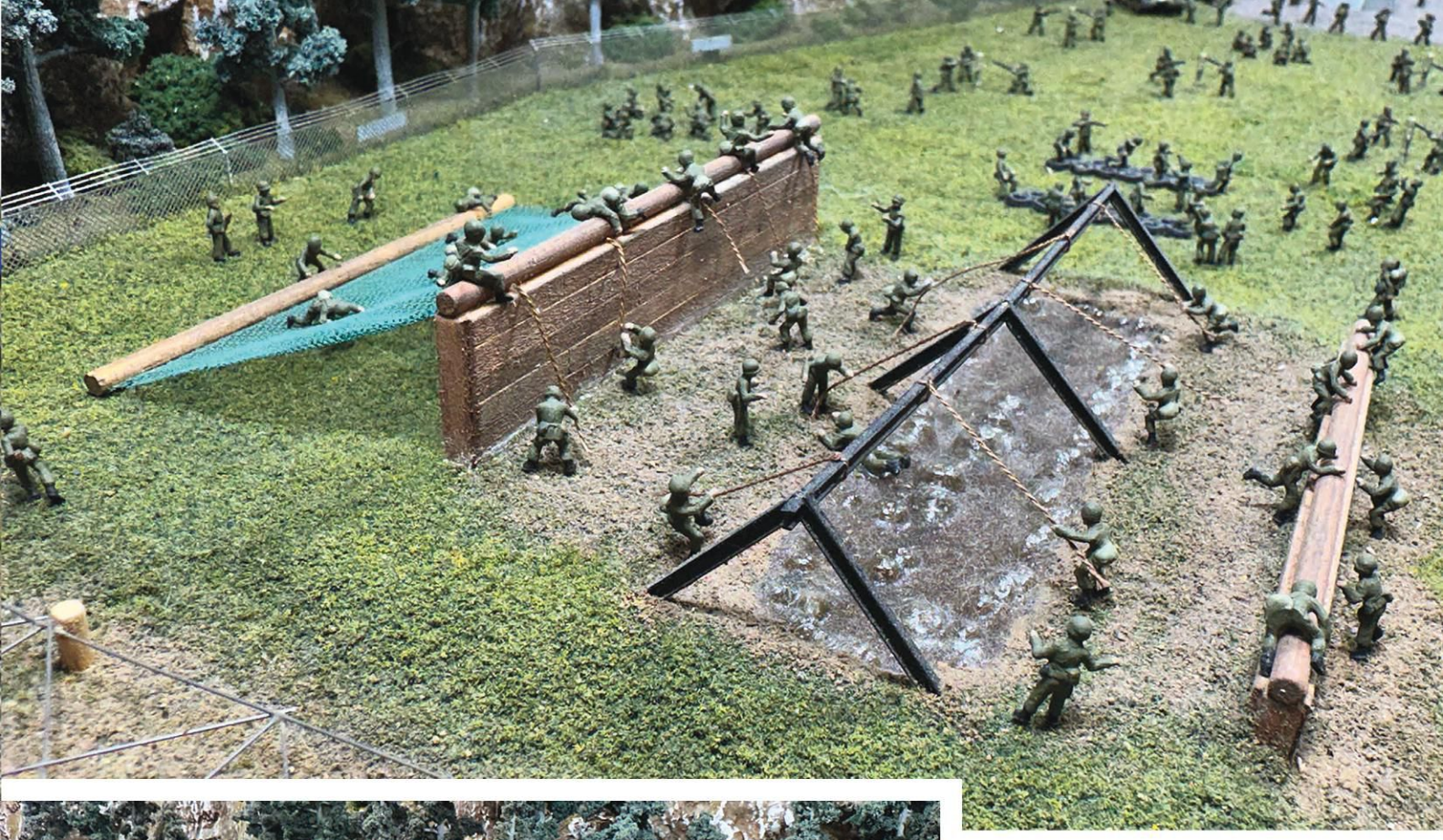
by **Roy Cutler**

MILITARY DECALS

With the painting done, it is time to apply decals. Here again, it matters which era you are modeling. From the early 1940s to the early 1970s, the white star was used on tactical vehicles typically on the hood, the doors and the back of trucks and on the front and fenders of track equipment. During WWII, staff cars had white stars typically on the back doors. By the mid-1950s, staff cars and Temporary Motor Pool (TMP) vehicles no longer had stars on them. Instead, they simply said "US Army, For Official Business" in smaller lettering on the front doors. In the early years of camouflage painted Army equipment (mid-1970s) the star was retained, but it was painted black.

Another variation to be aware of is that the white star on the hood of WWII







vehicles was oriented so the top of the star pointed toward the windshield of the truck. Sometime after WWII, the Army reoriented the hood star so the top of the star pointed toward the front of the truck. History books and online reference photos can help sort out which applies to your era.

Yet another variation you will see in photos of WWII equipment is a white star with a white circle around it. This was done to equipment that was involved in the invasion of Europe. It was not applied to equipment that was used stateside in WWII. So, if you are modeling a military train in the US in 1940s, it wouldn't have the circle around the star, unless it were headed to a port for shipment to the European Theater at the time of the invasion of Europe.

Where do you get N scale Army star decals? I only know of three vendors of N scale military decals. They are KenRay (who provide decals with each of their models), Perrin Miniatures and Tires & Tracks. I don't know if the last one is still in business. That said, I was able to use the white star decals found on Microscale Decal set No. 13-15. These decals are made for applying to 1/285 scale military equipment used for war gaming, but they will work for most N scale military equipment.

The Microscale military decal set comes with both individual white stars and white stars surrounded with a white circle. I don't use the star with circle decals that come with the set, but there are two sizes of individual white stars in the set that are useable. I use the larger ones on the hoods and doors and smaller ones on vehicle fenders.

Other markings on Army vehicles are serial numbers on the sides of the hood and unit markings on the bumpers. If you know how to read these bumper markings, you can tell exactly what unit the vehicle belongs to. Because of the small size of the lettering in N scale and the number of vehicles I have, I decided not to try to add this data to my models.

OTHER DETAILS

After painting and decal application, other details can be added. These include window "glass", convoy signs, convoy flags and radio antennas.

Window "glass" can be simulated using either Microscale "Kristal Klear," Gallery Glass "Window Color" (which is clear and is available from Hobby Lobby) or clear plastic sheets like acetate. I use clear Gallery Glass. It is a white viscous fluid similar in appearance to Elmer's White glue, except that it dries clear. Most N scale vehicle window openings are small and can be filled by getting a small dab of the Gallery Glass on a toothpick and touching the toothpick to the four corners of the window opening. The viscous fluid will fill the opening and, when dry, will appear as clear as glass.

Details like radio antennas can be simulated using a short length piano wire and gluing it in place. Radios can be found on many vehicles, but especially on command vehicles, such as jeeps. In modern times, most vehicles have radios.

If you want your vehicles displayed in a convoy, you need some signs mounted on a few of the vehicles. "Convoy Follows" along with a blue flag, would appear on the front of the lead vehicle and "Convoy Ahead" along with a green flag, appear on the rear of the last vehicle. "Convoy Commander" along with a diagonal black and white flag, appears on the convoy commander's vehicle. Vehicles hauling explosives would have a red flag. I used Excel on my computer to make these signs because I could put a border on the sign. Then I just scaled it down to fit the vehicle.

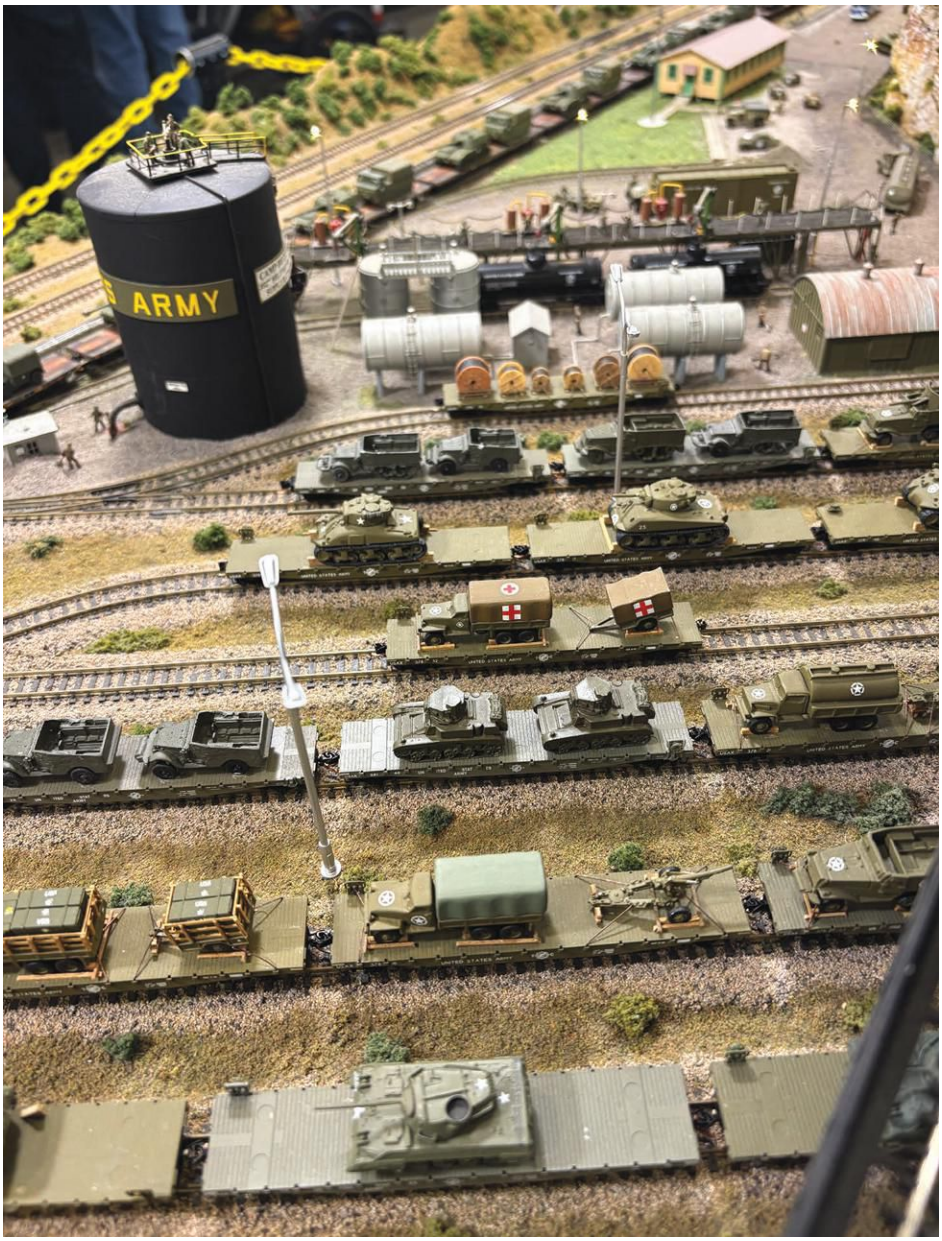




TABLES OF ORGANIZATION AND EQUIPMENT (TO&E)

To ensure accuracy and assemble what I needed in the way of Army equipment, it was necessary to know what equipment was in Army units that I wanted to model in my era. I searched online for Army "Tables of Organization and Equipment" (TO&E) for the unit types in the time I am modeling (1970). I couldn't always find exactly what I wanted, but if I found a TO&E close to that era, I used it. Alternate sources for this TO&E information are war gamer sites, since they need this information to represent the units they assemble for their games. Typically, gamers concentrate on combat units like Infantry, Armor and Artillery and not much else, such as Engineers, Transportation, Medical Corps, Signal Corps etc.

It helps to know the type of units you want to represent, rather than just buying random equipment. For instance, I was in a Combat Engineer unit, so I wanted one of my units to be that type. Using the TO&E for that type of unit, I found that I needed three platoons, each consisting of four 5T Dump



Trucks, one front end loader, one 2½T Cargo Truck and one ¼T Jeep. There would also be a company headquarters section with two ¼T Jeeps, two ¾T Trucks, one 5T Dump Truck, two 10T Tractors with 25T Lowboy Trailers, two D7 Dozers, one Full Tracked Combat Engineer Vehicle (basically an M60 Tank with a dozer blade and a demolition gun in lieu of tank barrel).

Using this online research method, I was able to come up with the TO&Es of a Mechanized Infantry Company, an Armored Company (everyone loves tanks) and a Mechanized Artillery Battery. With this information, I became selective in my online purchasing of the Army equipment and bought only what I needed to make up these units. This gives the Motor Pool area an organized look, rather than just being a collection of random Army equipment.

DISPLAYING THE EQUIPMENT

For the amount of equipment I had assembled, the Motor Pool became the logical place to display all of it. For it to appear as correct as possible in the space available, the vehicles in the Motor Pool needed to be parked by unit, just as they would be in a real Motor Pool.

The following units are displayed on the module in the Motor Pool area: a Combat Engineer Company, a Mechanized Infantry Company and an Armored Company, minus one platoon. (I have the missing platoon, but there isn't room to display it.) I also added



some TMP (Temporary Motor Pool) vehicles to the Motor Pool for added interest. TMP vehicles are non-combat vehicles for administrative use in maintaining the facilities needed to keep a military post operational.

TMP vehicles are painted differently than tactical vehicles. Tactical vehicles are painted in flat colors, so they don't give away their position by reflection. TMP vehicles are not tactical and have a glossy paint job, just like your private vehicle. In the era I model, that color was a dark, gray green. In WWII, most were OD green, but some higher-ranking staff cars were black. For a while, in the late 70s, TMP vehicles were light green.



MOTOR POOL IMPROVEMENTS

To make the Motor Pool area more like the ones I saw on active duty, I wanted to add three important features. These are the fuel island, the wash pad and the elevated lube rack. For the fuel island, I used the fuel island from Bachmann (1960s Esso Station) and painted one pump red for gasoline and one yellow for diesel. I added yellow painted bollards (posts) at the ends of the island to protect the pumps from being run in to by a careless GI.

For the wash pad, an area of gravel was removed and replaced with 0.040" Evergreen sheet styrene, sloped to drain to a central catch basin. To complete the wash pad, water hoses were added. These hoses were simulated by using a single strand of a multi-strand #16 electric wire with the insulation stripped off. The single wire was painted black and loosely coiled to appear to be in use.

Because indoor lube rack space is always at a premium, the Army had outdoor lube racks. The ones I saw were about 4' high and used for lubing and oil changes, as well as washing the underside of vehicles. To model this, two ramps with supporting pillars spaced about 10' on center were constructed using a styrene angle on the inside face of each ramp to keep the vehicles from driving off the edge of the ramps. Many of these real-life ramps were built to allow the vehicle to drive straight over the ramp without reversing, but I didn't have room for that, so the ramp on the module would require the driver to back down.

The original Motor Pool building was wide open inside. Most Motor Pool buildings have tool rooms, office space for the Motor Sergeant and his clerk and toilet facilities. Since we were adding interior lighting, a revised interior layout was made, and the needed office and tool room spaces were added using 0.040 sheet styrene for walls and Grandt Line windows and doors. Lube pits were simulated in some of the Motor Pool bays by using 0.060×0.060 Evergreen styrene painted yellow to form curbs around the pits and painted black between to simulate the pit between curbs.

OTHER IMPROVEMENTS

At the beginning of WWII, the US military faced a daunting task of training millions of soldiers, sailors, airmen and marines for war. This effort required establishing new training camps and/or enlarging existing ones. A standard design for temporary camp buildings was devised and these wood buildings, consisting of barracks, supply rooms, orderly rooms, mess halls and Motor Pools, were built across the US at Army, Navy, Marine and Airbases.

These buildings lent themselves to being modularized and built with speed, which is what the military needed at the time. For example, at Fort Lewis, Washington, 1500 of these temporary buildings were built in just 90 days. These buildings were supposed to be "temporary", as their name implied, but many were still in use decades later. In fact, during the Vietnam War, 30 years after WWII, many servicemen and women were housed in these very same temporary wooden buildings that their fathers and grandfathers used in the 1940s.

Fortunately for the N scale modeler, Micro-Trains made a series of laser cut buildings in this style. Unfortunately, they are no longer available, although you can still find them occasionally online or at swap meets. Over the years, I was able to collect several of these kits, which have been added to the military display. These buildings are equally at home in both the 1940s and 1970s, which are both portrayed on the modules.

To date, we have used one single story building for a headquarters building and two 2-story buildings as barracks. To capture the flavor of the times, we have plans to add several more barracks buildings and a medical dispensary to the display.

Another future project is to see if there is some way to automate the flagpole so at the playing of Reveille, the flag goes up, and at the playing of Retreat, the flag goes down, as it does in real life on US military bases around the world. So far, we haven't figured out how to make this happen.





BUILDING A MILITARY TRAIN

Often, when we see military trains on model railroads, the train is a collection of random pieces of military equipment that likely would not be on the same train in real life. If we want a realistic depiction, it helps to understand why the military uses trains to move military equipment.

Here are some of those reasons: shipping new equipment from the manufacturer to military units in the field, shipping equipment from one post to another for training or relocation of units, shipping equipment from or to maintenance depots for repair or scrapping, shipping equipment to a port for shipment overseas and shipping equipment to storage for future use.

I decided the train I wanted to depict was one where the unit assigned to that equipment was moving to a different location for training. Choosing this type of shipment means the equipment needed to represent the type of unit being shipped. Since I had Mechanized Artillery equipment and no room to park it in the Motor Pool, I chose to load an Artillery Battery and its assigned equipment onto flat cars for shipment.

Using TO&E for this type of unit, I was able to assemble all the major equipment needed to represent this unit. This included six M109 Howitzers, six M548 Ammo Carriers, five M813 5T Trucks, one M577 Command Track, four M561 Gamma Goats, five M35 2½T Trucks, one M37 ¾T Truck and five M151 ¼T Jeeps. The next thing I needed was 13 DOD flat cars to load this equipment onto. I chose the Micro-Trains MT # 137 52 023, six-axle DOD flat car for this job. Although the MT flat car is newer than the one that was available in 1970, I decided to use it, since the correct one (also six-axles, but new in 1950, and still in use by 1970s) is not available in N scale. AHM made the correct one in HO, but not in N.

LOADING AND SECURING MILITARY EQUIPMENT

Would it surprise you to know that the Army has a standard for loading and securing military equipment on flat cars? No, of course not. The military has had lots of practice since WWII and they know what will and will not work. In fact, they've put this experience in a user's manual. It is known as TM 55-2200-001-12. It covers how to block, brace and tie down everything from tanks to boats (yes, the Army has boats) and all things in between, including such equipment as trailers, jeeps, cannons, road graders, dozers, scrapers and armored personnel carriers. This TM is a valuable modeling resource for those who want to make a convincing military load on a flat car and it is available online for free. It even shows how to use and tie down equipment on bilevel auto racks and 80' trailer train flatcars.

For my artillery battery on a train, I used removable glue to temporarily attach the equipment to the flat cars. I am planning a future project to permanently attach the equipment using the prescribed blocking, bracing and tie downs in accordance with the TM mentioned above. In addition, I plan train lengthening to include a Construction Engineer Company, with its associated equipment, properly tied down.

MILITARY TRAIN MOVEMENTS

Once the equipment is on the train, the train needs to move to the new location. This then begs the question, does the military own its own locomotives and how are they used? Yes, all the branches of the US military have their own locomotives, including the Army, Air Force, Navy and Marine Corps, but they are not intended for use on



Types of trains used to ship military equipment

- New equipment from manufacturers
- Unit specific equipment being sent to training areas or ports for shipping
- Equipment being sent to depots for re-building or long term storage
- Chose to model equipment being sent as a unit
  - Chose Mech Artillery Battery
  - Used MT military flat cars (wrong era, but only available)
  - Needed Artillery Battery TO&E (online)
  - Collected equipment
    - Rapido M-109s
    - Shapeways
    - Rasputin
  - Researched, Painted and decaled
  - Yet to be done: blocking and tie downs per TM.
- Military trains are pulled by RR companies, rarely by military locomotives, which tend to be used on military installations.
- Can be guarded or not
- Length varies, but can be 100 cars long
- Modeled 13 car train to accommodate one Artillery Battery.

mainline trains. These locomotives are primarily used at designated military facilities to move rail cars around on the facilities' own track. Some are used for training military personnel to operate locomotives on these facilities, and in the case they are called upon to operate them in a war zone somewhere.

Most of us would agree that seeing military trains go by is both exciting and fun. This usually only happens by chance or on one of our rail fan trips specifically for that purpose. So, how did the military train come to be where we could see it? Typically, the Army will schedule a movement by rail and coordinate the number and types of rail cars that will be needed. This equipment will be gathered up from wherever it is available and eventually brought to the requesting installation by the private railroad company that serves that installation.

Once the train is loaded by the Army unit making the move, the private railroad company will take over the movement of the train across its territory. This means you are likely to see military trains being pulled by private company locomotives such as BNSF, UP, NS etc. It is highly unlikely that you would see a military locomotive pulling the train unless it is on military property.

Military train lengths can vary substantially. It depends on what needs to be moved as to how long the train will be. A 100-car military train would be unusual, but not out of the question. The weight of the equipment being transported and the route will have some impact on train length. For instance, pulling a 100-car train load of 70-ton tanks (two per DOD flatcar) over Tehachapi pass might limit the length of the train or at least require additional locomotives and/or helpers.

My 13 car Artillery Battery train isn't as long as I'd like, but on the other hand, it provides an interesting contrast to the usual freight train seen on the layout. While I have plans to lengthen the train, there's always that old bugaboo to think about "the longer the model train, the more chances for problems." We have run 100 car trains on the MRNS club NTRAK layout, but I'm not planning anything nearly that spectacular, besides that would be a ton of Army equipment to model. I think I'll settle for a 30 car military train. That would be both manageable and interesting.

Whether you'd like to build your own military train or just enjoy watching them, hopefully this article has given you some ideas and information about the various aspects of US military railroading and the modeling of it.

The Sutter Creek Division



Phase One Iron Mountain, Part 2

by **Ward Thorne**

View of the tunnel into Iron Mountain.

Welcome back to Part 2 of the Sutter Creek Division Phase One Iron Mountain. Now that the foundation of the layout is complete, it's time to focus on scenery. This article covers my techniques for crafting realistic landscapes and adding key visual elements such as trees, buildings, vehicles, figures, and detail features that enhance depth and storytelling.

Trees

When I first started in this hobby, I made most of my trees, but now prefer to purchase ready-made trees as a time saver. I find that every time I think I have enough trees on the layout, there always seems to be room for more. Trees in the Southern Colorado Rockies range from various types of pine, spruce, and fir, along with aspen, maple, and cottonwood. When I install



Denver and Rio Grande Western 5771 leading the Rio Grande Zephyr into the Iron Mountain Tunnel.



Looking up at the Betty Lou Mine.

the pine trees, I like to mix them, considering that larger trees have access to more water, while shorter trees tend to grow at higher elevations. Pine trees also commonly grow out of cracks in rocks. With aspens, I group several in one place because they share a common root structure. Large deciduous trees, such as cottonwoods, are typically found near rivers, streams, and lakes at lower elevations. Spending time researching the amazing woodland environment around my home has provided me with a great reference for truly photogenic scenes.



The Betty Lou Mine and cable house.

Structures

The Iron Mountain section of the layout is an abandoned mine once served by a narrow-gauge rail line. This site was later designated as a historic site by the park service. Since it is located on Bureau of Land Management land, it features much of the old rail line available for exploration by high-clearance and off-highway vehicles. The Betty Lou Mine is named in honor of my mother, who supported and assisted my father in his own endeavors of creating their G gauge Colorado and Midland outdoor layout, and consists of a discontinued JV Models Burnt River Mine Kit that



The Stamp mills and mine cart at the Betty Lou Mine.



Narrow Gauge Caboose installed as reminder of days past.



The Lucky Strike mine.



Memorials of those who perished in the Belly Lou Mine.

I weathered using Monroe Models weathering washes, Aim oil-based wood stains, and dry-brushed light gray acrylic paint for aging. For the abandoned narrow-gauge line, I laid a half strip of Midwest N scale cork roadbed onto the area that I want to resemble an old, abandoned rail line. I then spread some Aleene's Tacky Glue on the cork roadbed and install my weathered wooden ties in typical railroad spacing, randomly angling some of them and leaving out a few here and there to simulate the deterioration over time. I then use some Express Scale Ballast SE0403 Fine Natural Soil & Dirt, along with areas of Arizona Rock and Mineral's 1031 Black Cinder Ballast, which is what the Rio Grande narrow gauge and standard gauge used in much of their mainline routes. I dust off the tops of the ties and set the ballast with thinned matte medium, mixed with a few drops of Dawn dish soap for quick absorption. Much trial and error go into the weathering process of any item, but when you achieve the precise look, it is immensely rewarding.

Vehicles, people and other details

With the advent of 3D printing, the details available in N scale are truly



Heading Downgrade on Highway 50.



Along the Narrow Gauge right of way.

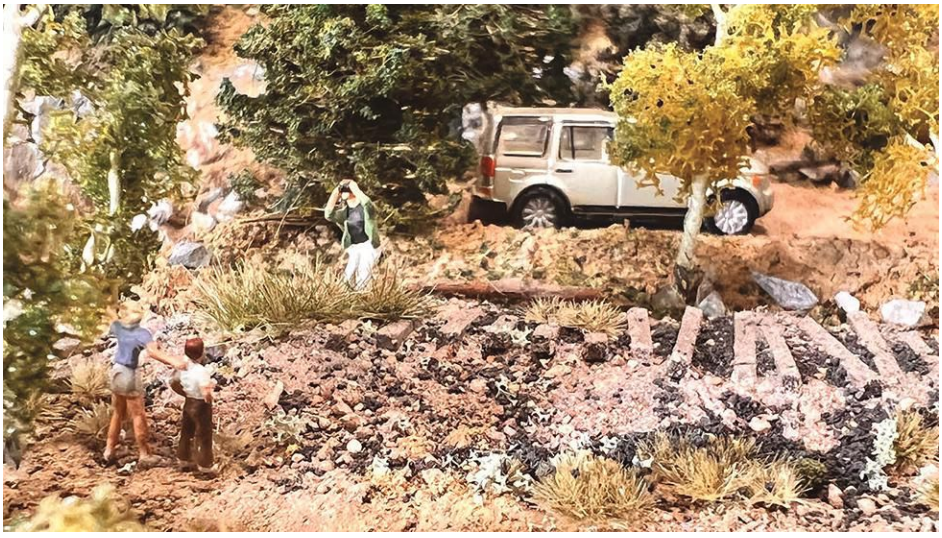


Filling the tank before the ride.

remarkable. Mountain scenes are simply not complete without wildlife, and Bernard Hellen addressed this need with Miniprints. I was thrilled to populate mountain scenes with big horn sheep, mountain lions, elk, moose, ducks, hikers and even a Sasquatch. I enjoy painting my own animals for realism. The details are very important to me. I find the pre-painted ones generally come in just one color, while real animals have a variety of shades and colors in their fur. Woodland Scenics, Preiser, and Noch woodland animals are also integrated into the Iron Mountain scenery. For people, I used figures from Preiser in action poses, such as Dad photographing the family, ATV riders, hikers, and friends preparing for a day of motorcycle riding. I like to add details like sunglasses and repaint the skin tones and clothing to highlight more features. Signs are an essential part of any model railroad, and if you're modeling the modern era, they're even more important. As signs are twice as prevalent as they were 20 years ago. The speed limit signs are made by Tichy-Train, and the historical site signs are custom-made and printed on photo paper with the backs painted silver and scale lumber used for posts. Vehicles are one of my favorite things to model. When I first started in N scale in 1977, this area of detail was sorely lacking in variety. Now, with the advent of 3D printing,



Preparing to ride on the old rail bed.



Dad is quite the shutter bug.

there isn't much you can't find. The Freightliner single axle cabover is from Royal Models and has been modified with a triangular airfoil and painted red to represent the exact rig my brother-in-law drove in 1983. It is pulling a set of Consolidated Freightways, the company he worked for until its demise, 20-foot trailers made by Atlas. The Ford Bronco, Ford Expedition, Dodge Charger, and Ford Ranger were created by the very talented Jens-Uwe Jahn from Jahn3d and Madaboutcars, currently selling through Showcase Miniatures and custom-painted by me. The Audi and Land Rover come from Busch, the Ford highway maintenance truck and Ford Crew Cab are from Atlas, and the Land Rover Discovery is from Oxford Models. The trailer and dirt bikes are from Yellow Dwarf and are also custom painted. The creation of 3D printed products has greatly enhanced the details of my Sutter Creek Division layout.

Summary

The Sutter Creek Division is a fictional vision based on prototypical equipment running through scenery that emulates the Denver and Rio Grande Western Railroad's Tennessee Pass line. I look forward to showcasing more of its development in future articles. So, stay tuned for much more to come.



Bighorn Sheep snack as A DRGW Coal Drag passes.

Extra Extra! Read All About It!

Part 5: Moving Along

by **Dennis Murphy**

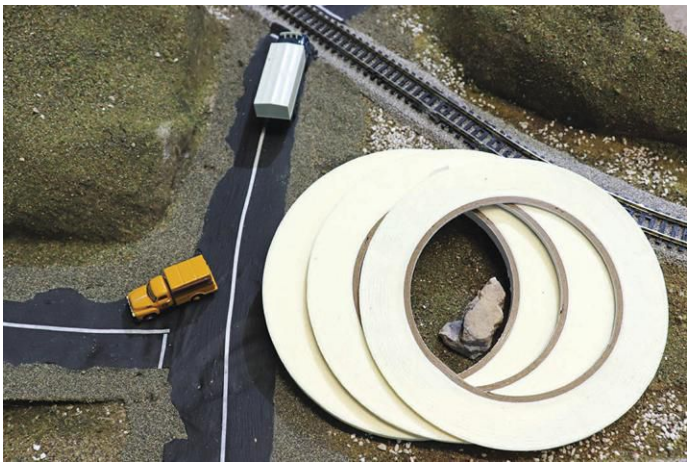
Here you can see I was just having some fun messing about. These are a bunch of loose structures that usually live on my test layout. Nothing fancy, but I wanted to see some life on my new layout. These structures will not make it onto this layout permanently, but it's fun to see them there now. (It must be time to take them back inside the house... And get back to work on the layout.)

Well, look at that. We have really been moving right along, and what a fun adventure this has been. Don't you just love our hobby? There are just so many different aspects we can fill our time with.

Alright, enough back slapping and good job for now; it is time to get back to work, if you want to call this work. In this article, we will be working on the finishing touches. We will make



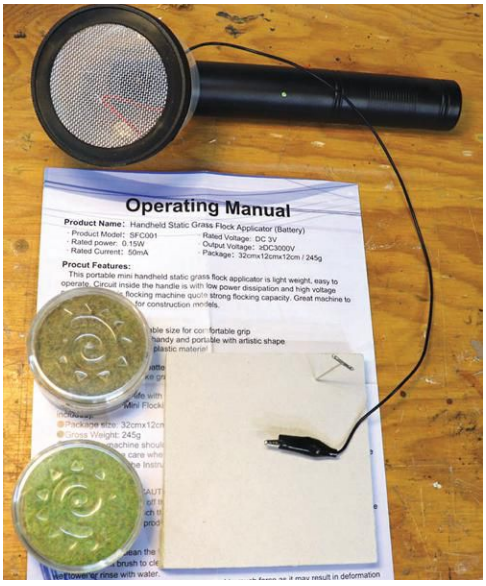
Did you know that Woodland Scenics Company just celebrated its 50th anniversary? Wow... 50 years. (They are almost as old as I am.) Anyway, I haven't supported their company single handedly, but I certainly have done my share. This is just a bit of their stuff I have on-hand. When you find the good stuff, best keep using it.



Roads have lines on them. Painting lines on the roads (for me anyway) is a real pain. What's a guy to do? I decided I should survey the idea of auto painting pinstripe masking tape. Wow, look at that. It's not the most durable product ever made, but it should hold up for a while. And it's way easier than trying to paint on those silly road lines.



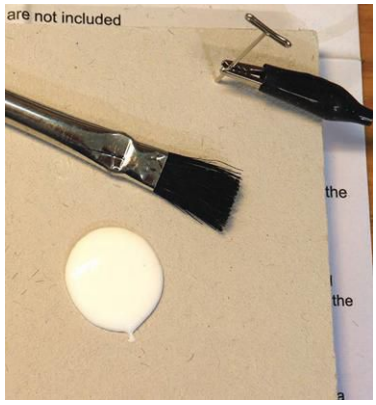
One way I have fun with these large projects is to focus on one small area at a time, rather than that big picture thought. You know the old saying: How do you eat an elephant? One bite at a time. Anyway, I decided I would build the smaller industrial area first. I chose three of the Built-Up structures and went to work. First things first. I needed some way to get the wires for the lights in the structures down under the layout. I find using straws work just fine for this chore. You drill a hole, then glue the straw into place. And run the wire down the straw. Easy-Pezy.



Have you ever tried a Static Grass applicator? It's an odd little tool that adds a static electricity charge to your grass. This helps the grass to stand up straight as the glue dries, rather than fall over in a heap. They are a bit pricey, but they make your grass look more real.



This is where all the magic happens with the static grass applicator. The charge builds up on the metal grating as the grass falls through. You DO want to be careful NOT to touch the grounding wire to the cup grating as it will... ZAP.. (Oh yes, there it is again. The old voice of experience rearing its ugly head.)



Start by spreading around your adhesive of choice, making sure you cover all the area where you want the grass to end up. Don't dilly-dally around, as the glue should not be given a chance to dry before you add the grass.



And here is what it looks like when dry. Not hard at all, but it is a bit time consuming. Remember, it's a hobby after all. We should never be in a hurry with a hobby.



One of the things to keep in mind as you are building your layout is planning. Of course, working right up front on your layout is always the easiest. Working in the back of your layout, you have to reach and bend over for periods of time (Ouch.). Do NOT succumb to the temptation of starting up front. Start at the very back and work forward. Here you see me adding some static grass behind where some of the structures will be placed. It is never easier to work on the back of things after structures are in place. Do it right the first time, and it will definitely come out much better.





Here is an early stage shot of this small area I started with. What do you think? I really like the direction it's going. Certainly not finished yet, but moving along.

(*Left and below*): Let's take a bit of time and play with some dreaming. Well, the road could run like this. And then let's have the cross road curve around in the back. And this structure could possibly fit here. You get the idea. I just love this part of the game.

Some of my modeling buddies spend endless hours drawing out their what-ifs. Not me. I like to touch, see, and move around items to get a 3D feel as to how things will come out. That's why I built all the cardboard structures to play with. This, as usual, is your choice.







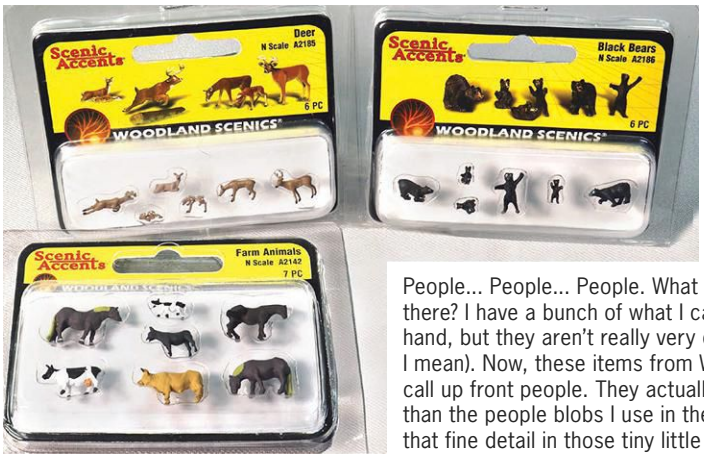
(*Left*): OK... I have all those what-if's running around in my head, so it must be time to work on something else. As it worked out, Woodland Scenics (as I said earlier) is celebrating their 50th anniversary. They really wanted this project to come out GREAT, and so they jumped in with both feet to help out. Well, how do you go about achieving that goal of being GREAT? In my humble opinion, there is absolutely no such thing as too much detail. Just look at this BIG Box-O-Fun. All I can say is WOW. (I love these folks.) They must have cleaned out their warehouse for us. Just look at all that fun stuff.

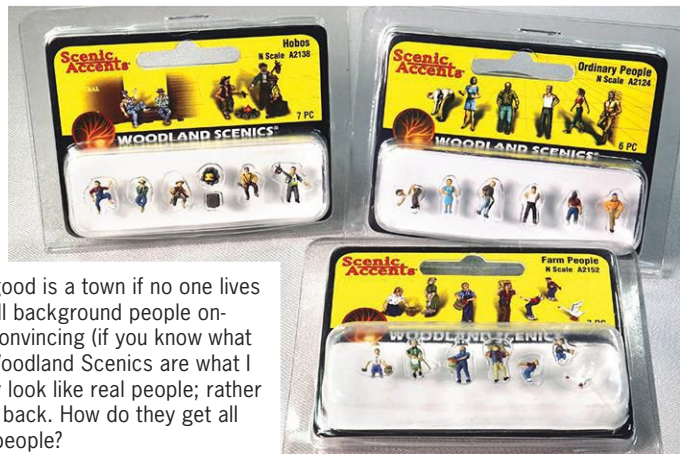


Please allow me to introduce you to some of the fine detail items that Woodland Scenics offers to fill out your world. In these two photos, you can see some of the very fine vehicles they offer. Some of these are stand-alone items, and some are what you might think of as mini-scenes. Some of them actually tell an entire story. What good fun.



All right. Do you want real? Do you want vehicles on steroids? If your answer is a yes, then you need to look into the Woodland Scenics line of Just Plug Lighting System items. (The Built-Up structures in the Landmark Series we have been working with are also equipped with these Just Plug lights. More on that later.) How about tiny little N scale vehicles with working lights? What? Once again, all I can say is WOW.





People... People... People. What good is a town if no one lives there? I have a bunch of what I call background people on-hand, but they aren't really very convincing (if you know what I mean). Now, these items from Woodland Scenics are what I call up front people. They actually look like real people; rather than the people blobs I use in the back. How do they get all that fine detail in those tiny little people?









What else would you find in a downtown? How about street lights? One problem I have run across in our hobby of model railroading is that many items available for purchase in N scale are really HO scale, all be it cut down a bit. They just do not fit in scale convincingly. Well, the Woodland Scenics' folks have done a great job of keeping everything the correct size and to scale. Thanks Woodland Scenics.

(*Below*) If you're going to have those wonderful Just Plug Lighting System items on your layout, then you will need all the stuff to easily and seamlessly make them work. And I must say that this system is so easy, that any modeler can make them work, no matter what your level of experience may be.





Here is a fun thing to think about. How about those mini-scenes I was talking about earlier? These items tell an entire story in one small package. I would suggest you place these items in some very visible place up front, so it would be hard to miss them. I find these items to be very fun.



To have some order in our little town, we will be needing some traffic signals. These items are very finely made, and the best to scale I have ever seen. How do they get those tiny lights in these things? They come with a red or a green bulb installed, so make sure to install these signal arms in the correct order. Which direction do you want your traffic flow to be in? Ah... That looks good.







It's time to get back to the layout. After I messed about with which of the actual structures I was going to use, and figured out where every one of them was to be placed, it was time to paint in the roadway system. I wanted to maximize the amount of stuff I could pack in the limited area, while still keeping a comfortable feel. Only time will tell.



Ahhhh... Look at the surface of that roadway. Would you want to drive over that rough surface with you little car? I don't think so. You might remember I had a bit of a dust-up with the plaster a while back and it has come back to haunt me. Out came the plaster (again)... Slop it around... Sand it all nice and smooth... Paint the area (again)... And, ah yes... MUCH better. Success this time. If you find you have a little problem along the way, take the time and fix it right then. It's never easier later.



It's time to start working with the sidewalks and building foundations. Not all of the structures will have this addition; only some of them. Some of the structures will be set at ground level. To make these sidewalks/foundations, I used heavy-weight cardboard. Actually, this product was designed for picture frame matting. It's thicker than most cardboard, and it takes paint well, but this stuff does warp unless you paint both sides at the same time. Problem solved.



Of course, the glue is water-based and would warp the cardboard unless you press it down into place as it dries. Once the glue is dry, it's time to add all the lines on the roadway.



Let's see... What's next? Oh yes... It must be time to add stuff here and there. And then, in a bit, set the structures into place. How about street light? And trees along main street? This is the fun Part (for me anyway). So much to do.



What do you think? Things look to be moving right along. Well, it must be time to add the road lines. They ended up being a ton of work, but they came out quite well. I might suggest you practice a bit before you move to actually adding lines to your layout. Some of my earlier lines are... Ummm, let's just say, could be better.

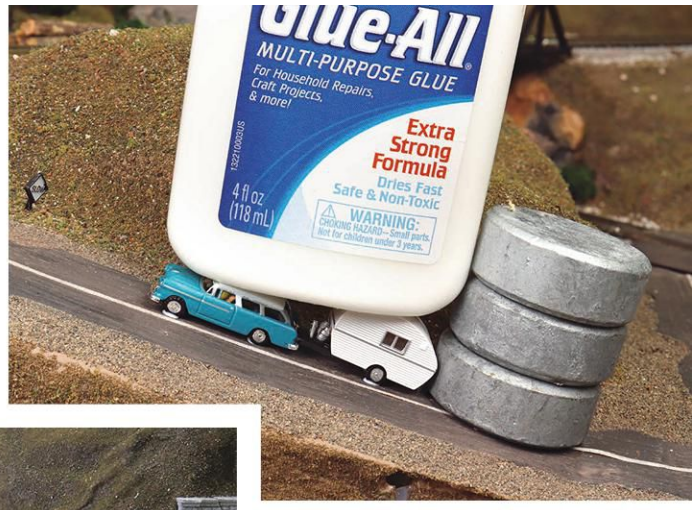
the town scene and be installing things like street lights and traffic signals, and actually set the structures in place we decided on using, and adding vehicles, people, and... and... you get the idea.

I don't much enjoy doing the track work, but I really have fun with this finishing stage of the project. One bit after another of adding all this fun stuff. And just like that, it starts to actually look like something. It's like painting your house. Hours and days of prep-work and what do you have to show for it? Not much, but a mess. And then, you put on the paint, and it looks

(*Left*) Planning is always an important aspect of any project. Before you go drilling and gluing, make sure to know exactly where you want an item to go. It's never easy to change an installed item once it's glued into place. As my dear old Dad used to say, measure twice, cut once. (Sound advice.) Many years ago, I was also introduced to a different saying. It goes something like this: I have cut this (whatever) three times, and it's still too short. (Think about that!)



Detail? Did someone mention details? If you want details, you can have details. Just take a close look at the detail included with some of these tiny little cars. You can almost see them moving around in the seat. (This is so much fun.)



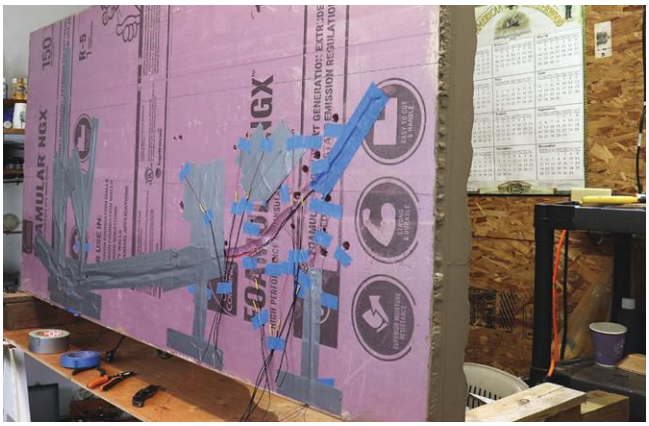


As you go forth and start actually gluing items into place, you might find a few challenges. I find as things go together, often times I need to become creative on how the job gets done. This hill is so steep that the little car and trailer kept rolling down backwards before the glue had a chance to set up. Sometimes you need to convince an item to do what you want it to do. There, that worked.

(*Left*) Moving right along: Let's think about what's next? I know. It must be time to install all those wonderful little lighted items into our layout. We have street lights, traffic lights, lights in the structures, and all the stuff needed to make them work.

With the Just Plug items, they are easy. The most difficult part here is getting the wires all the way through the bottom of the layout. Of course, I had to add my own lights to the structures I built.

I must admit that I bundled many of the wires together and soldered to make sure of problem-free operation. You really don't need to solder, as they come with little clips. But, sometimes I just can't help myself. (Where is that soldering iron?)





Wires... Wires... Wires. They are everywhere. You will notice in this photo that the layout sits quite nicely on its side. This makes working on the wiring way easier. This step is very time-consuming, so just plan ahead. You want to get this correct the very first time. It would be problematic (to say the least) if you had to go back and alter any of the lighting at a later time.

(*Right*): OK, let's be honest. In the spirit of full disclosure, I should have pre-tested every single tiny bulb, structure, and vehicle to make sure the lights worked correctly. But I didn't. When all is said and done, a couple did not work. Will I tear everything apart to replace them? No... I don't think so. My back story is, these folks are out to eat for the evening. No one is home. (That's my story and I'm sticking to it.) Did you notice how I used drinking straws to hold some of the lights I installed? Worked great.



so much better.

We will certainly have some fun with this article. Come along with me, and let's get started. If we don't get started, we will never get finished. (And then start something else.)



Well, will you have a look at that. At long last, I am setting the downtown structures. Some of my modeling buddies leave their structures loose so they can move them around. As this layout is destined to be dragged around to model train shows, I thought it might be wise to glue everything firmly down so nothing gets lost along the way.

Now is the time we will be adding those small details all over the place. I just love having piles of scenic materials on-hand so I can add stuff at my whimsy's desire. Now it's starting to look right.



It's time to get ramped-up with the scenery. I have a ton of stuff on-hand that has been left over from this or that project. It's amazing (and quite fun) to hide those unfortunate spots with a bit of scenic detail. And just like that, the problem spot is all better.



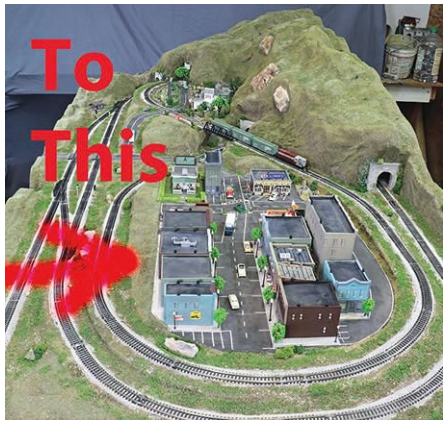


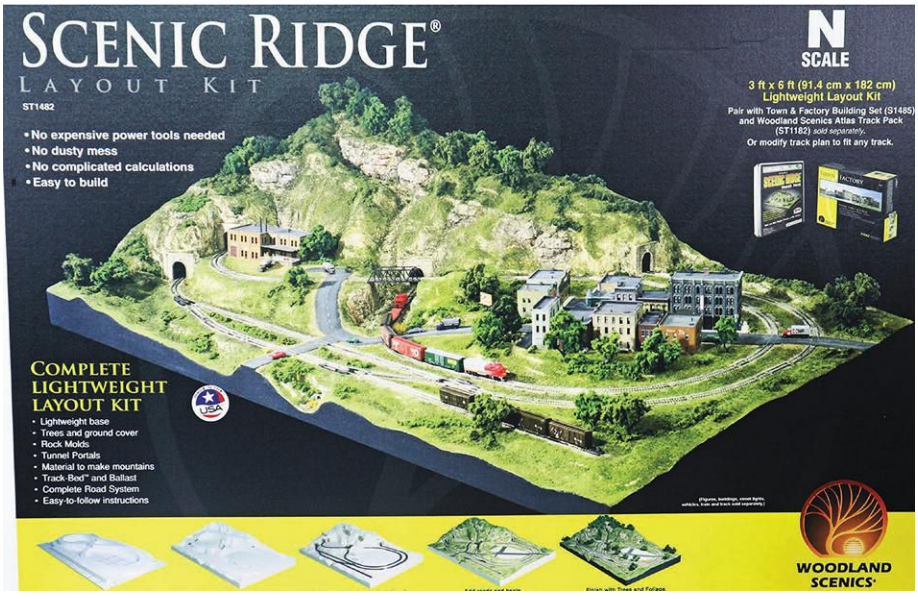
(*Left & Below*): With scenery, the sky is the limit. You have a little problem area? Who cares, cover it up with scenery. Remember those tunnel portals I had such a time with? All better. And don't forget hedges and fences and... AND... You get the idea. Am I finished with my scenic detailing? Not a chance. This will take some time to complete. Or, more likely, it will never be finished.











(*Left*): From this, to that. There you have it. We are all done. Ahhh... Hold on a moment... That statement isn't correct at all. I like to think that a project might be completed, but a hobby is never finished. If you actually finish a hobby, then you need to go off and find another one. So, let's leave this article with the idea that our layout project has moved along nicely. And now? Well, it's time to fine tune the different areas, make them even better, and add more stuff along the way. More is always better in my book.

The way I go about making my scenes better over time is by taking really close-up photos. These shots are not destined for publication, but rather they are just for my use. When you get in really close, you see all the little problems that do not show up when you're standing back. Oh... Wow... Look at that little mess. I can fix that. HA. Much better.

Before you know it, a different direction to work on will pop into your head. It could be structures, or adding some additional lighting... Or, I never liked that little area, so I will be tearing it out and redoing it. And it goes on and on. Isn't our hobby of model railroading just the best?

Well, until next time, I best let you go play with your new layout. As I have mentioned before, please send in some photos of how your project is moving along, Send them to *info@nscalemagazine.com*. I really would like to see them.

Have fun. Woodland Scenics (as I said earlier) is celebrating their 50th anniversary. They really wanted this project to come out GREAT, and so they jumped in with both feet to help out.

Well, how do you go about achieving that goal of being GREAT? In my humble opinion, there is absolutely no such thing as too much detail. Just look at this BIG Box-O-Fun. All I can say is WOW. (I love these folks.) They must have cleaned out their warehouse for us.

MY LIFELONG HOBBY



by **Herm Stippich**, Photography by **Paul Moroder**



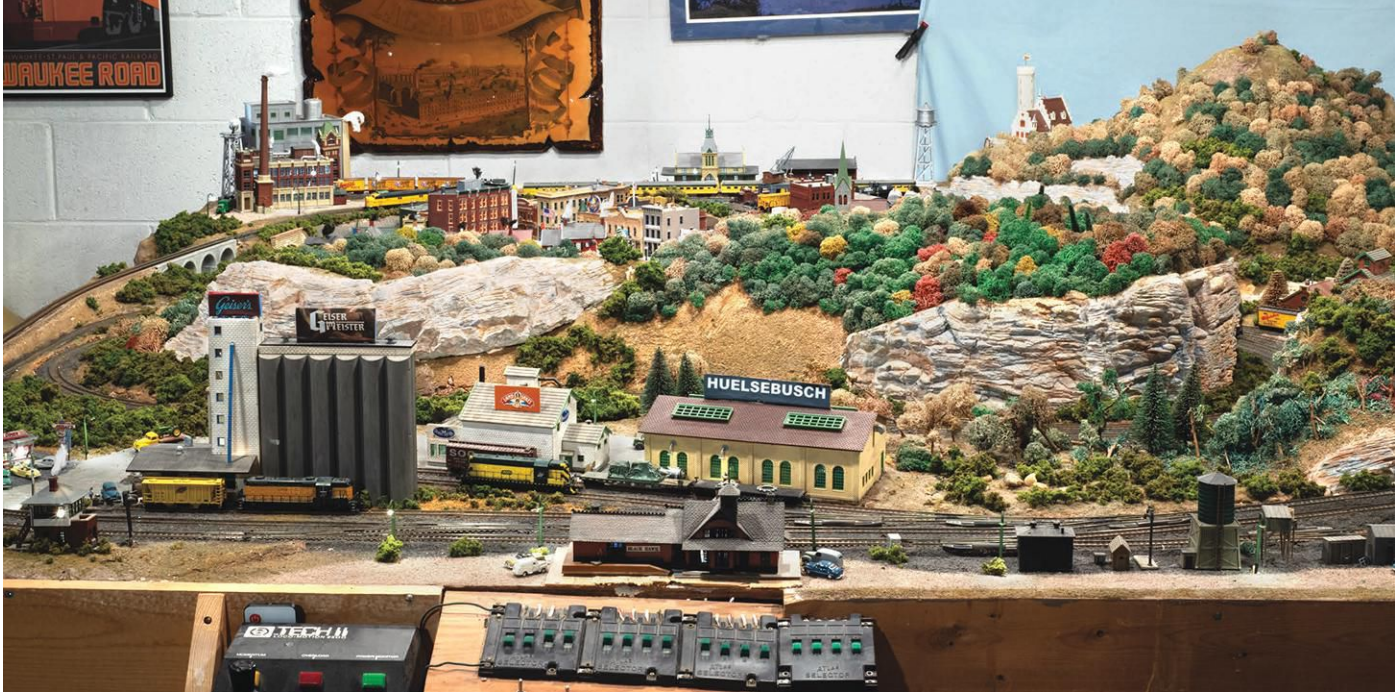
It's often said that model railroading is a lifelong hobby. That has certainly been the case for me! My friend Peter and I started playing with trains at three and progressed to models in elementary school. He with Marklin, modeling Germany and I, modeling America in HO with Tyco. Just a 4×8' sheet of plywood was my HO world in one corner of our basement in Wisconsin. The track was nailed directly to the plywood and traversed the landscape of plaster hills and homes with lush green sprinkled lawns. Round & round, it went without purpose. Peter had progressed far beyond this, so I knew there had to be more.

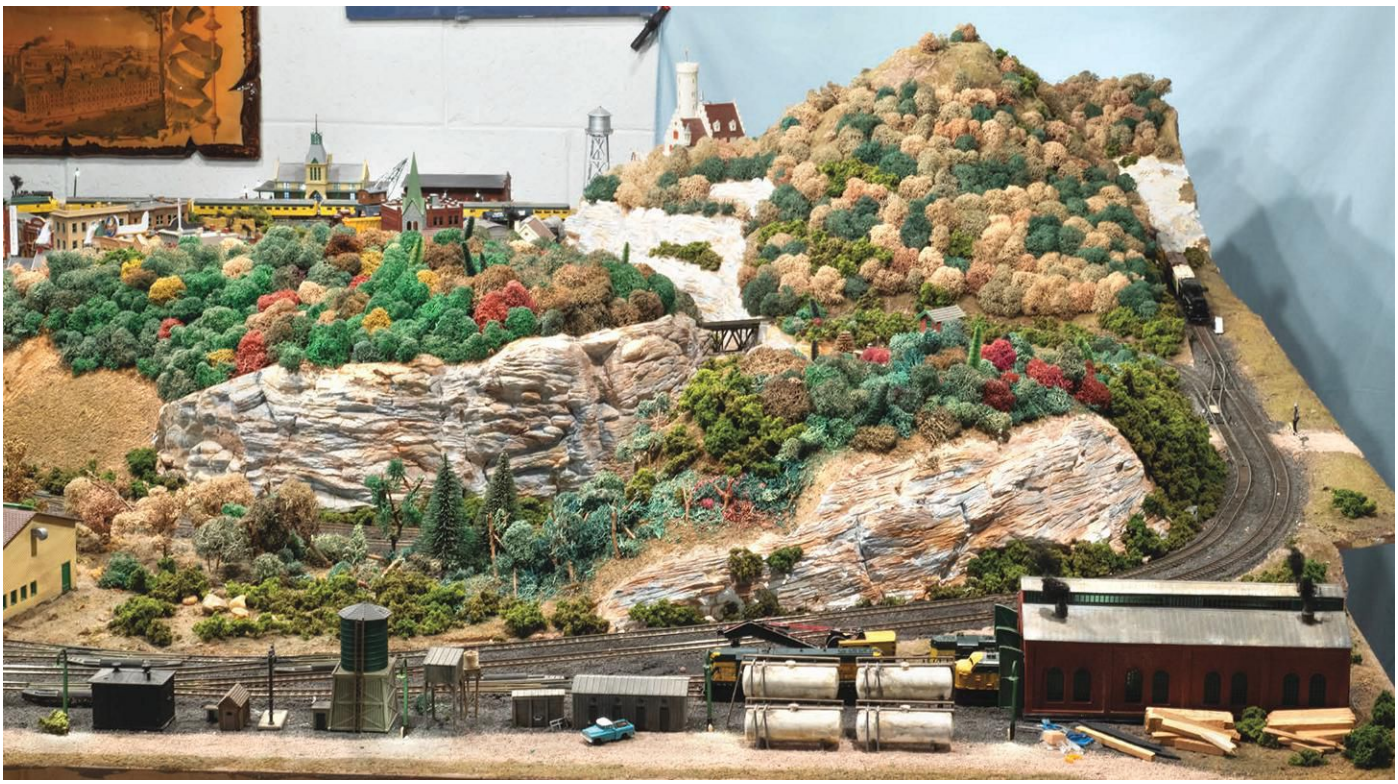
At 17, I decided to switch to N scale after realizing the opportunities for scenery, operations and running long trains. N scale was still in its early stages in 1977 when I started accumulating Chicago & Northwestern locomotives and rolling stock of various lines. Atlas was then the standard setter. The Atlas track planning book *Nine N Scale Model Railroads* by John H Armstrong & Thaddeus Stepek (Revised Aug 1976). provided the best options. After months of enjoyable studying and "imagineering," the Scenic & Relaxed (N-108) was the best choice for me.

Of all the layouts detailed, this track plan offered the most railroading and scenery in any given area. The use of wooden risers attached to the open framing and the jigsaw cutting of the ⅝" plywood "cookie cutter" allowed the landscape and roadbed to rise and fall smoothly, once placed over the risers and screwed in place. The result is the effect of the terrain being there first and the railroad having been surveyed through it for the most advantageous route. The gentle over and under, with the combination of Atlas deck truss and plate girder bridges, provides photographic interest.

Of course, Atlas products were featured in the materials list, so the track and electrical controls were Atlas and of 1977 vintage. The track plan is divided up in blocks with plastic switches controlling the delivery of power to the route. DCC wasn't yet even a gleam in someone's eye. At that point, I just wanted the trains to run smoothly. One nice feature was two long sections of Atlas flex track along the river and along the bluff above it, making for gentle curves and long trains. The track runs entirely on cork roadbed with Woodland Scenics gray cinder ballast. Much later did I airbrush the rails, ties, and ballast the brown hue that a working railroad takes on over time.

The Black Hawk yard in the foreground serves an industrial sector and two stall engine house. Some of the





industries are in homage to friends and family. Huelsebusch Machine Tool (my friend Peter) has a shipment loading, Geiser Grain & Malt (my in-laws) serves the brewery (more on that later). U&I Furniture (my dad & grandfather) builds fine furniture. The products are Con-Cor, Heljan, and Model Power. The various miscellaneous structures are Walther's Cornerstone Trackside Structures. All are weathered & detailed to varying degrees. Airbrush, chalks, and India ink washes are among the methods used.

The most recent addition to Black Hawk is Miss Molly's Diner. It's a popular lunch spot for the blue collar folks and a hangout for the gearheads at night. It's the people placed around the layout and detailing that bring it to life. Across the street from Miss Molly's, a flat tire is being changed. The docks have varying degrees of activity, and the CNW engine house and maintenance are always busy. Over behind the Machine Tool, a tree is being cut down, while a few whitetail deer look on with interest. The modest Black Hawk depot caters to a few stops, but its best days appear to be behind it.

The scenic centerpiece is the hill that divides the sight line, providing the illusion of distance. The curving rock face and other outcroppings are a combination of methods. The large one being from plaster poured into a rubber mold and curved in sections. Other outcroppings I was able to set with plaster and carve freehand to continue as it would in nature. I did the painting of all the rocks in watercolors to create a soft blending affect. The wooded hills


Geiser's
GEISER MEISTER
MISS MOLLY'S DINER
MOLLY'S DINER


Geiser's
GEISER MEISTER
MISS MOLLY'S DINER
MOLLY'S DINER





are covered in lichen, using only the rounded tops. The original ones have grown brittle and been replaced with more natural looking lichen. The crumbling of the brittle pieces are still providing an under story of foliage different from the others.

On the other side of the hills, the waterway emerges from a large culvert, quickly and turbulently, making its way past the Benatar & Jett Leatherworks (Heljan & Kibri), under the bridge to a broader and more languid river. Cautious of the epoxy's odor & mess, at that time, I used a spackle I could whip into rapids and waves. Various shades of green acrylic paints are blended and shaded from darker in the middle to lighter towards shore. The river was the edge of the original 4×6' phase of the layout, derived from the Atlas track plan. This layout sitting on a simple table framework of 2×4s, connected by carriage bolts, was enough to keep my interest to varying degrees through undergrad, graduate studies, and a condo of my own.

Newly married to my wife, Judy, we purchased a house and the layout moved to the basement and more space. It was at this time that the imagineering spark of expansion struck. I'd always wanted a downtown to model with its bustling activity and the opportunity to place the layout in a specific time period. If the locomotives and rolling stock do not give clues to the casual observer what time period is being depicted, then vehicles and signage should immediately set the scene. My birth year of 1960 is within the beloved transition from steam to diesel and features the post-war vehicles and products within memory. Wiking, Woodland, and GHQ have a wide selection of post-war vehicles. Preiser figures are quality plastic and painting. Blair Line and Dave's Decals have every conceivable product from this era. I've found eBay to be an excellent source for vehicles, figures, and signs at a good price.

My new train room still was somewhat confined between existing shelving and the home's utilities. An additional 2×4' section on a separate adjoining table was added, that would feature the downtown and a larger hill in the corner of the new section. From the beginning, I decided against a tunnel and the issues of access it would present. A dramatic cut is more interesting as the train traverses and emerges. The new Peco Code 55 track would loop around the edge of the new section, through the cut, and downhill into the original Black Hawk yard. A few minor re-routes of the original track plan on either end of the yard results in a double track going through Black Hawk with trains meeting side-by-side for more





than half the layout. Crossovers between the inner and outer loops were also added to allow increased operations.

The loop continues gently uphill over a century old stone arch bridge, past the Steinfuller brewery and above the downtown of Grafsburg.

The Steinfuller Brewery is a combination of a Kibri factory model



(for the brewhouse) and a Walther's Cornerstone model (for the bottlehouse). A siding services this industry running around the clock for thirsty customers. Shipments from the Geiser Grain & Malt elevator in Black Hawk provides the main ingredient. On the other end sits Thunder Mountain covered with lichen tips with its signature painted rocks outcroppings. The mountain is foam board layered upward and smoothed with spackle. Attached are plaster slabs, which I carved and painted with the same watercolors. A rocky and sandy shoreline completed the original waterway where rocks and sand would naturally deposit from the current. The river continues under the stone arches for another railroading photo-op.

Sitting majestically on the foothill is the castle of original founder and brew master from Germany, Graf von Steinfuller. The Faller castle was a gift from Peter, which sat among my other unfinished models. How to incorporate it into my US layout? Inspiration struck with the framed photo of King Ludwig's Neuschwanstein Castle on my wall. The backstory followed of the Graf being homesick for his native Germany. So, he built a castle to oversee his new domain. This was my answer to the usual question from the casual visitor of how and why I have a castle on my layout. It's your own little world and you may create any story to add interest. Model railroading offers wide license to the imagination!

The City of Grafsburg is laid out diagonally to add interest and features three avenues of egress/ingress, with destinations limited only by the imagination. The majority of buildings are Design Preservation Models and Walthers Cornerstone. All are hand painted, detailed and weathered to varying degrees. The businesses reflect



my birth year of 1960. An example is the Columbia movie theatre showing John Wayne in "The Alamo," which premiered the week I was born. The Schlitz Palm Garden and First Wisconsin Bank also reflect that era. A US post office and recruiting center is a must for any downtown, as is a town square with a US flag and Civil War cannon as its centerpiece. A downtown also needs a department store and the four-story Schuster's is in homage to the beloved store of hometown Milwaukee from that era. Judy created the custom sign on Canva. A Coast-to-Coast hardware, A&P corner grocery store and a tavern or two, are a must.

A coal depot is also characteristic of this era. It is set at the edge of the downtown with its backyard being a drop point from an overhead trestle. Still under construction. The chimney smoke reflects that coal and fuel oil are still the chief means of energy and warmth. The coal train traversing the interior track comes from distant sources. The mine in the middle of the hill with its siding, appears to be abandoned.

A bit out of character is the model of Eddie's Service & Towing, an actual family members business. The signage are cut-outs from the business card. Business cards, plastic swizzle sticks, and ads in show and sports programs, are nicely sized for N scale. Another is Judy's Quilt Café, which stands next to the school, offering exquisite fabric art. Uphill from Eddie's is a Faller church and abbey with a Preiser cemetery and



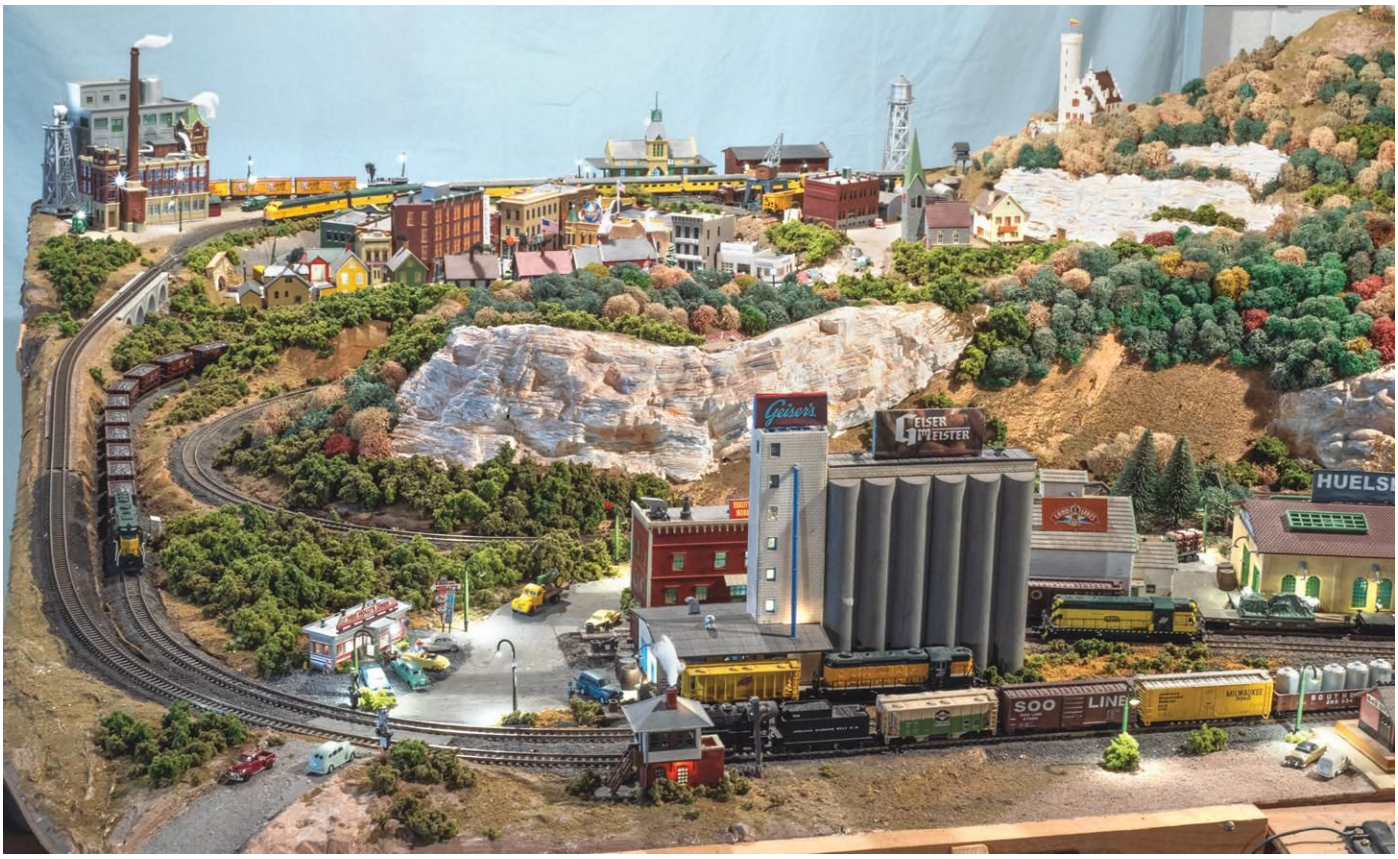






garden. Preiser monk figures are performing various chores, although two seem to be emerging (or entering) the Schlitz Palm Garden in town – hmm!

It's fun to create various scenes that add interest for the visitor and the backstory. Lots of activity can be found in the yards of the row of homes across the square, such as the car wash party in the driveway at the (Walthers Cornerstone) bungalow. A couple of unfortunate men are pushing a cruiser up the hill to the (Cornerstone) Mobil station, because Eddie's doesn't sell gasoline. (Why don't they just walk?)



A word needs to be said about lighting. At its original construction, Black Hawk was lit by a few bulbs wired in series and attached to the MRC transformers. A few years ago, I came across an article featuring N scale layout lighting using fiber optics. A revelation that eliminates the thin wiring, soldering, and inconsistent connections that result in poor lighting. Different sizes of fiber optic strands can be easily cut to size, inserted into a building through a drilled hole, and the other end into a light box. Very simple and effective!

The intensity of the lighting may be regulated by how far into the light box the fiber is inserted or withdrawn. It may also be controlled by a remote to change the intensity of all the fibers in that one light box. There are five light boxes with well over 100 lights, in all. The street lamps, goose neck lamps, and building lamps are premade with the fibers already attached. Docks, doors, streets and businesses, can be spotlighted. The effect of all this lighting is dramatic! Add to this the headlamps of the trains through the towns and yards, another dimension of modeling railroading comes to life. Dwarvin is the manufacturer and is found on the *Trainz.com* site.

The crown jewel and center of any town of the steam era was its train station. Even in 1960, there were plenty of examples of varying architecture. Unique was the Gothic sandstone station at Berea, OH. I had seen an article in the 1976 NMRA Bulletin on this station and its current sad state of disrepair. Included was an N scale plan for scratch building. I was enamored by this station and my hope was to someday build it. As time went by, my scratch building skills never developed, but I always kept a spot on the layout for this station. About a year ago on a trip east, with the forbearance of my wife Judy, we made a detour to visit it, now fully restored and operating as a restaurant. It was quite a thrill after so many years!

I was determined to complete my dream, somehow. I began an internet search and even wrote to Walthers trying to convince them to manufacture an N scale model of this beautiful station. My search led me to *leopardarchmodels.com* where an N scale 3D print of the Cleveland B&O station was offered. I contacted the seller asking if he'd ever done the Berea Gothic Sandstone station. In fact, he was in the initial stages of doing so and offered to sell me the first production model. I was over the moon! The kit came about a month or so later with complete instructions on the exact paints to use in replicating the original native sandstone and trim. The station now proudly overlooks Grafsburg, servicing trains and passengers.

At that point, my layout appeared complete – at least to the casual observer. Of course, a model railroad is really never complete! It need not be perfect to share. Near term upgrades are planned for the streets of Grafsburg with signage, striping, and stop and go lights. Some of the shops have interiors printed on cardstock, requiring brighter backlighting. Roof top details, the coal drop, weathering loco's and rolling stock are also on the To-Do list. The most obvious upgrade is conversion to DCC to retire my two venerable MRC DC transformers. DCC would allow the independent operations across both lines I had envisioned at the time of expansion. A demo layout to learn the basics of DCC will be a fun project. And so it goes with the ever expanding universe of N scale model railroading! Cheers!

The Short & Nn3arrow

Modelling the Pacific Coast Railway, Part 27: Turning the Corner and Heading South – Hadley Junction Part 1; Kauai Model Railroaders

by **Tom Knapp, MMR #101**

Looking back on the previous 26 chapters of this story you have patiently endured, it seems appropriate to revisit the original layout plan, especially since I have spent the past two years describing building the layout's locomotives and rolling stock. Now that I have a 1928-1938 roster, it is time to get back to the layout. This introduction to the rest of the layout will begin with some maps and plans – including some backtracking – so hang in there.

As mentioned in earlier episodes of this continuing story, the size of my "train room" (the spare bedroom in our Hawaii condo) means I had to be selective on the Layout Design Elements (LDEs) which form "scenes" along the PCRy right-of-way to include in this configuration of the layout from the rich potential of this narrow-gauge railroad. (***Figure 1***) In the belongings we shipped to Hawaii from San Francisco were the museum diorama of the wharf at Port San Luis and my venerable two-section-module of the PCRy facilities in San Luis Obispo. (Nov-Dec 2019 *N-Scale Magazine*) The Port San Luis shore-side yard, Avila Beach, and the Port Harford Asphalt Company near Avila Beach were obvious selections filling the space between the wharf at Port San Luis and the PCRy yard in San Luis Obispo, as shown in ***Figure 2***, and their construction, as well as that of the standard gauge SP loop and lower level test tracks were covered in Parts 10-15 (Nov/Dec 2020 through Nov/Dec 2021). The part of the layout to the right ("south" of San Luis Obispo) remained largely "TBD" at that time.

While the Port San Luis wharf and shore facilities and the PCRy San Luis Obispo yard and facilities were modeled as close to prototype as feasible, heading south from there enters a

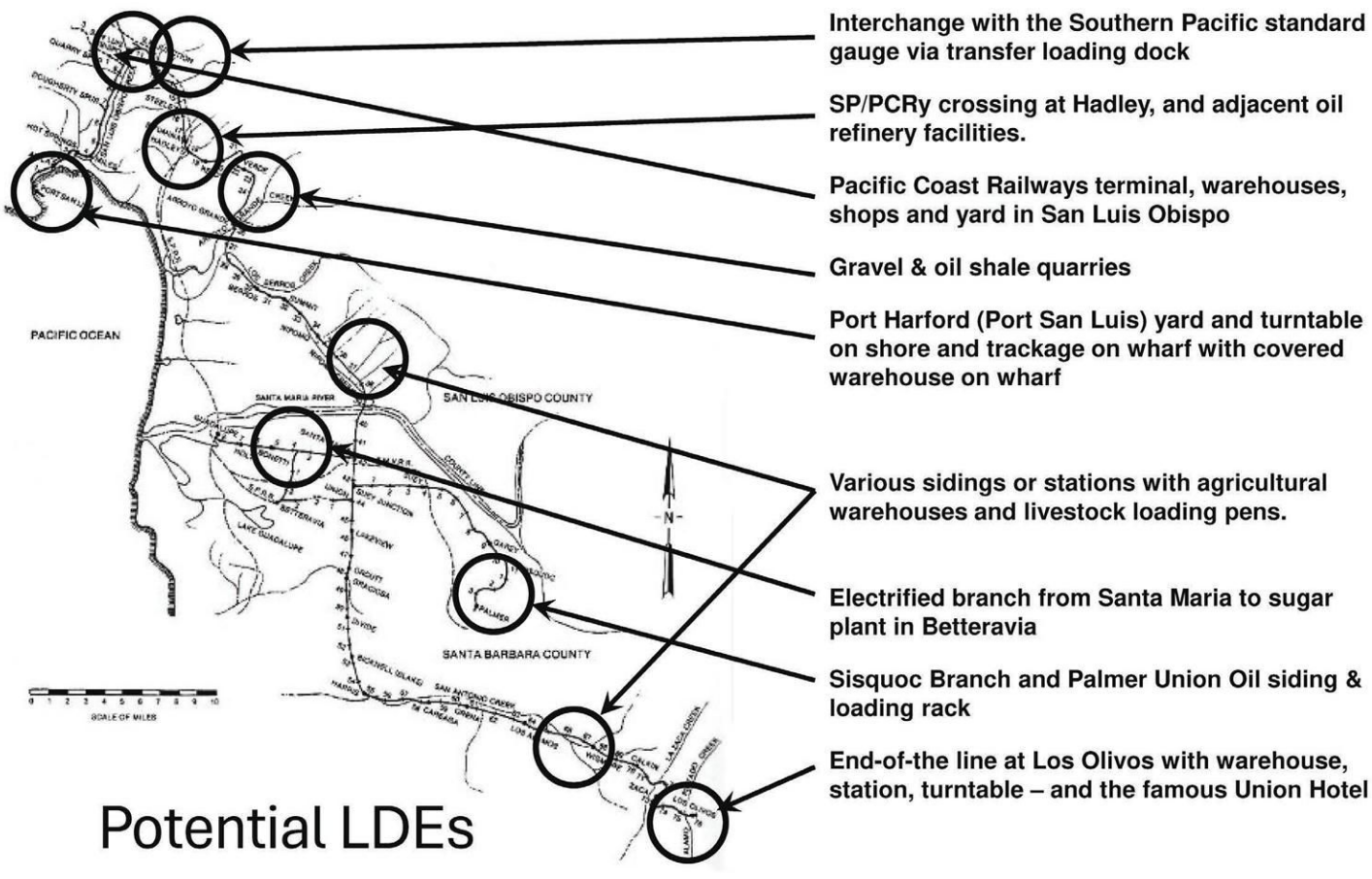


Figure 1: Map of the Pacific Coast Railway on California's Central Coast showing some of the potential Layout Design Elements which tell the story of the railroad and the region. (Map from *The Pacific Coast Railway: Central California's Premiere Narrow Gauge*[1] courtesy Benchmark Publications.)

realm of "proto-free-lance" modeling, capturing some typical or signature features adapted to the available space and current layout configuration. I can rationalize this for two reasons: (1) the sectional construction of the layout means additional sections can be added in the future if more space becomes available to incorporate other features of the PCRy, and (2) it's my layout and I'll do what I want to.

And this is where it gets interesting. I needed to select LDEs for these remaining sections that would help tell the story of the PCRy, which was largely defined by agriculture, livestock farming, oil, and rolling hills covered in tall grass and oak trees. Equally important to deciding what to include is what NOT to include for now in this limited space. The prototype PCRy ran from its headquarters at South & Higuera streets east along South Street and past the Exposition Park Raceway dirt track to a spur leading to a transfer loading dock at the Southern Pacific station before turning south towards Santa Barbara (***Figure 3***). I did not have room to include the SP spur, although, due to the sectional nature of the layout, it could be added in some future configuration of the layout, so this fell by the wayside – for now.

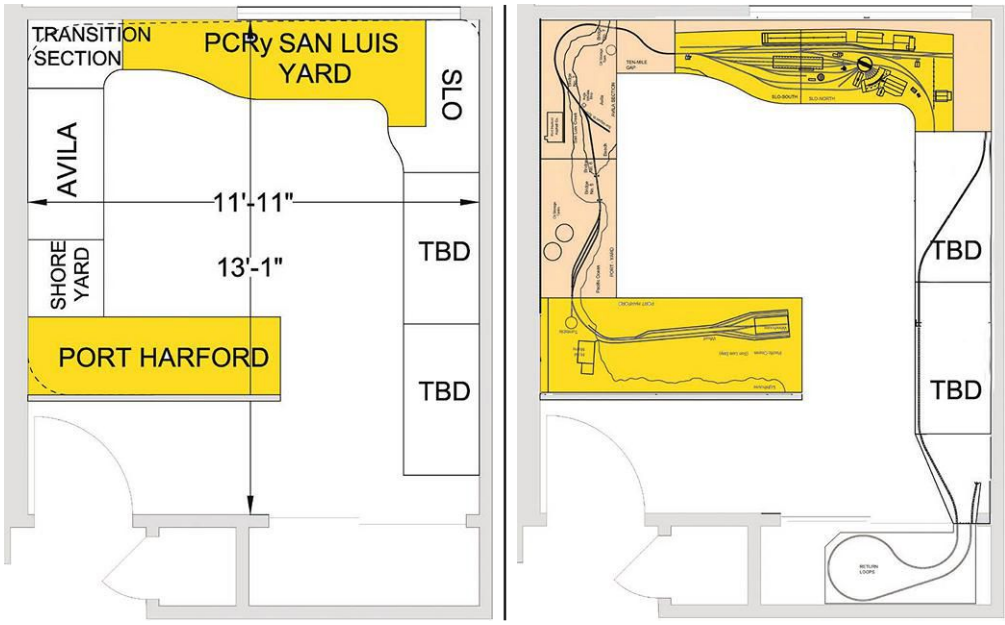


Figure 2 (*Above*): *Left*: original pre-construction layout plan showing sections being shipped to Hawaii as well as "TBD" sections; *right*: layout progress through Part 16 of this series, with sections south of San Luis Obispo still "TBD."

So, what are the remaining LDEs I can fit into my room, and how do they relate to the PCRy system as a whole? ***Figure 3*** shows a PCRy's timetable, which I found useful not only for understanding operations, but also for planning the layout. I have highlighted the stops represented by the layout sections described in this column to-date. (Green for the sections I brought from San Francisco, blue for the sections described in earlier chapters.) I also show what I consider some locations incorporating elements important to the

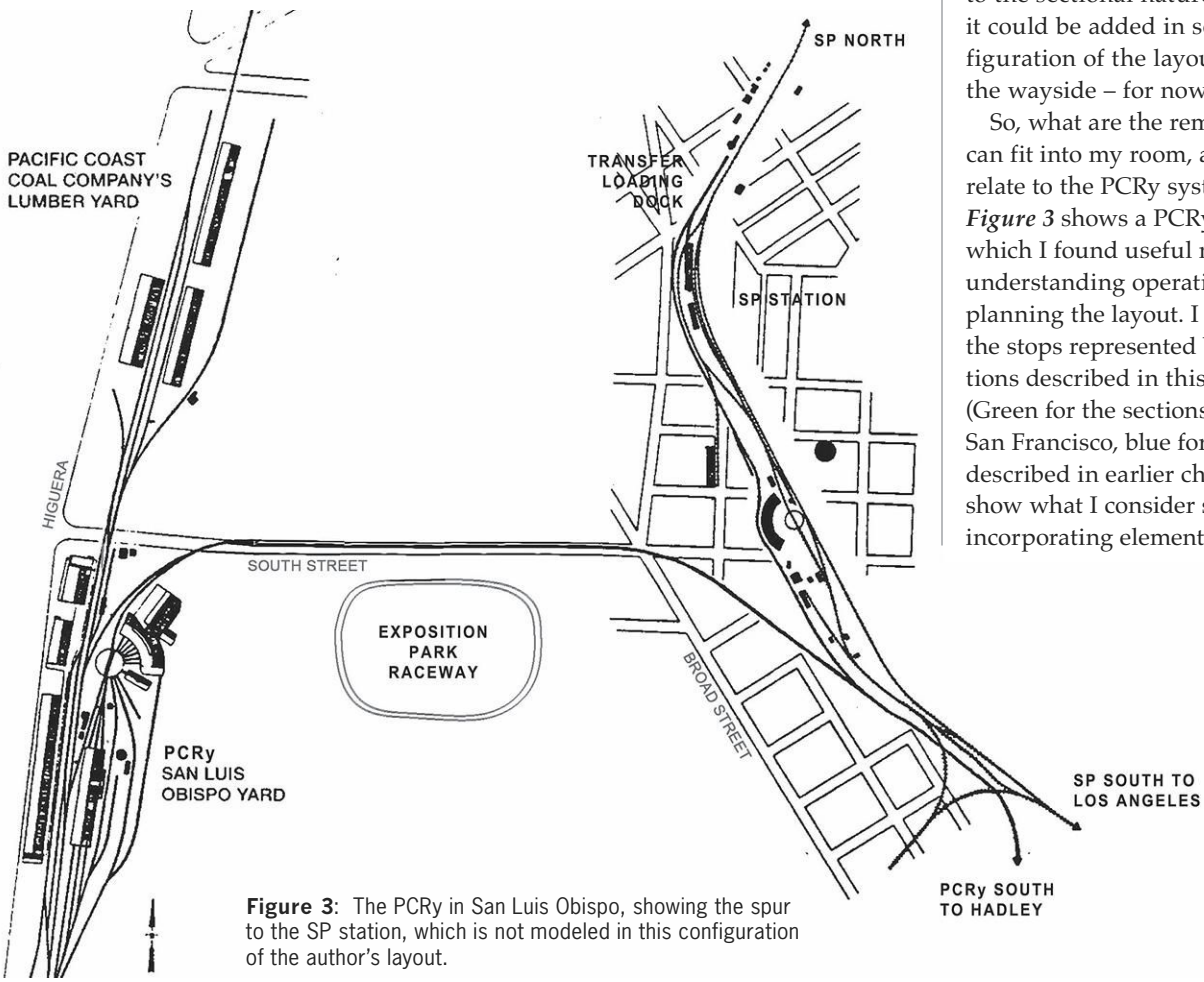
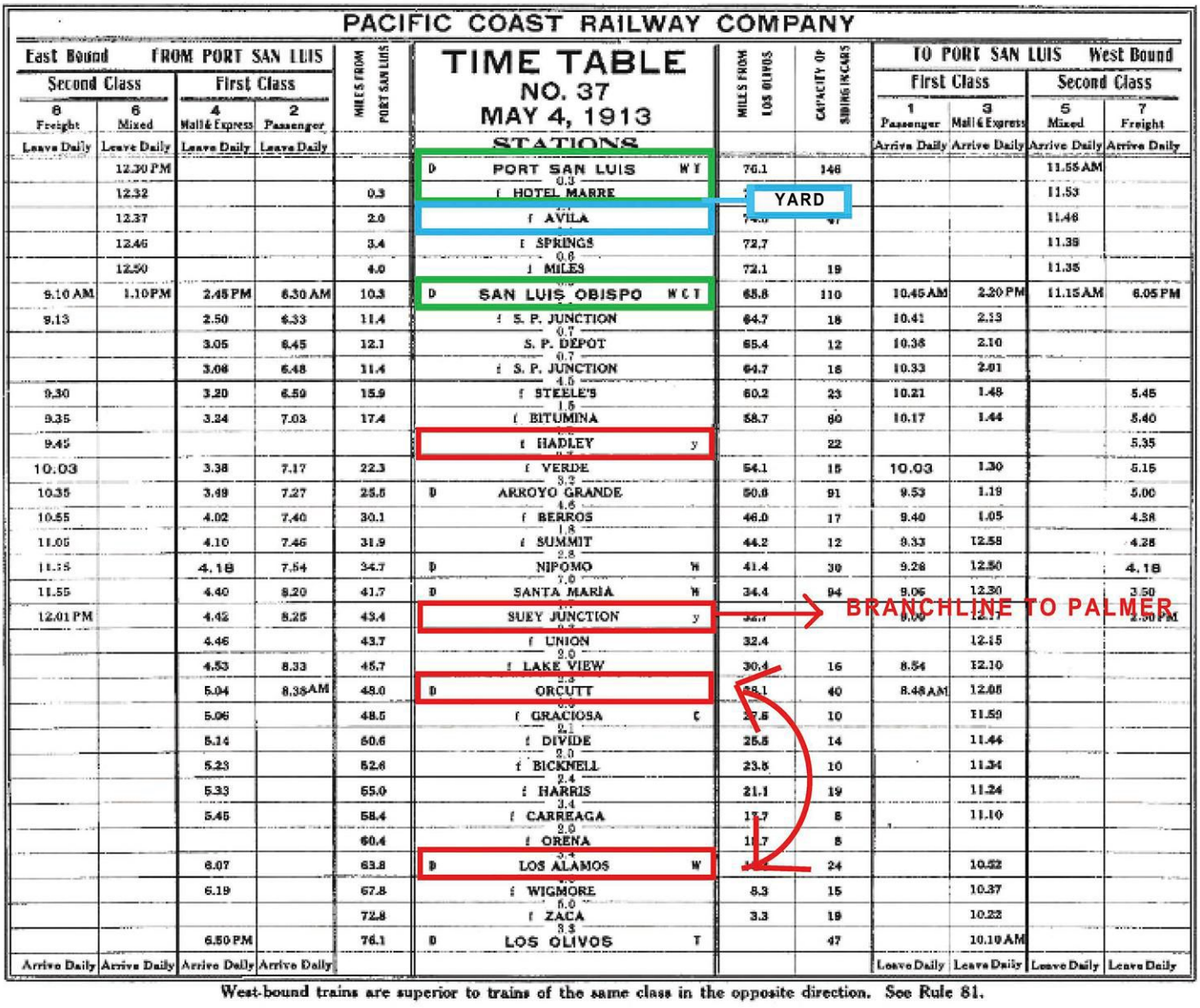


Figure 3: The PCRy in San Luis Obispo, showing the spur to the SP station, which is not modeled in this configuration of the author's layout.



PACIFIC COAST RAILWAY COMPANY

TIME TABLE
NO. 37
MAY 4, 1913

East Bound — FROM PORT SAN LUIS — West Bound

East Bound Second Class 6 Freight Leave Daily	East Bound Second Class 6 Mixed Leave Daily	East Bound First Class 4 Mail & Express Leave Daily	East Bound First Class 2 Passenger Leave Daily	Miles from Port San Luis	Stations	Miles from Los Olivos	Capacity of Siding in Cars	To Port San Luis First Class 1 Passenger Arrive Daily	To Port San Luis First Class 3 Mail & Express Arrive Daily	To Port San Luis Second Class 5 Mixed Arrive Daily	To Port San Luis Second Class 7 Freight Arrive Daily
	12.30 PM				D PORT SAN LUIS W Y	76.1	148			11.55 AM	
	12.32			0.3	0.3 f HOTEL MARRE					11.53	
	12.37			2.0	1.7 f AVILA					11.48	
	12.46			3.4	1.4 f SPRINGS	72.7				11.38	
	12.50			4.0	0.6 f MILES	72.1	19			11.35	
9.10 AM	1.10 PM	2.45 PM	6.30 AM	10.3	6.3 D SAN LUIS OBISPO W C T	65.8	110	10.45 AM	2.20 PM	11.15 AM	6.05 PM
9.13		2.50	6.33	11.4	1.1 f S. P. JUNCTION	64.7	18	10.41	2.13		
		3.05	6.45	12.1	0.7 S. P. DEPOT	65.4	12	10.38	2.10		
		3.08	6.48	11.4	0.7 f S. P. JUNCTION	64.7	18	10.33	2.01		
9.30		3.20	6.59	15.9	4.5 f STEELE'S	60.2	23	10.21	1.48		5.45
9.35		3.24	7.03	17.4	1.5 f BITUMINA	58.7	60	10.17	1.44		5.40
9.45					f HADLEY y		22				5.35
10.03		3.38	7.17	22.3	4.9 f VERDE	54.1	15	10.03	1.30		5.15
10.35		3.49	7.27	25.5	3.2 D ARROYO GRANDE	50.8	91	9.53	1.19		5.00
10.55		4.02	7.40	30.1	4.6 f BERROS	46.0	17	9.40	1.05		4.38
11.05		4.10	7.46	31.9	1.8 f SUMMIT	44.2	12	9.33	12.58		4.28
11.15		4.18	7.54	34.7	2.8 D NIPOMO W	41.4	30	9.28	12.50		4.18
11.55		4.40	8.20	41.7	7.0 D SANTA MARIA W	34.4	94	9.05	12.30		3.50
12.01 PM		4.42	8.25	43.4	1.7 SUEY JUNCTION y	32.7		9.00	12.25		3.50 PM
		4.46		43.7	0.3 f UNION	32.4			12.15		
		4.53	8.33	45.7	2.0 f LAKE VIEW	30.4	16	8.54	12.10		
		5.04	8.38 AM	48.0	2.3 D ORCUTT	28.1	40	8.48 AM	12.05		
		5.06		48.5	0.5 f GRACIOSA C	27.6	10		11.59		
		5.14		50.6	2.1 f DIVIDE	25.5	14		11.44		
		5.23		52.6	2.0 f BICKNELL	23.5	10		11.34		
		5.33		55.0	2.4 f HARRIS	21.1	19		11.24		
		5.45		58.4	3.4 f CARREAGA	17.7	8		11.10		
				60.4	2.0 f ORENA	15.7	8				
		6.07		63.8	3.4 D LOS ALAMOS W	12.3	24		10.52		
		6.19		67.8	4.0 f WIGMORE	8.3	15		10.37		
				72.8	5.0 f ZACA	3.3	19		10.22		
		6.50 PM		76.1	3.3 D LOS OLIVOS T		47		10.10 AM		
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					Leave Daily	Leave Daily	Leave Daily	Leave Daily

West-bound trains are superior to trains of the same class in the opposite direction. See Rule 81.

Figure 4: The PCRy's 1913 Timetable – stops outlined in green are included in layout sections shipped from San Francisco; stops outlined in blue are sections built in Hawaii previously described in this series; stops outlined in red will be described in this and following issues. (Features of the stop at Los Alamos have been modeled at Orcutt in the timetable.)

reason for and character of the railroad and the environment it served:

• Hadley – the location of the famous SP-PCRy crossing where the narrow-gauge had the right-of-way, as well as two oil refineries.

• Los Alamos – a typical agricultural and livestock stop, also including some interesting water tanks. (I like the features of this stop so much, I shifted them to the timetable slot belonging to Orcutt.)

• Palmer on the Sisquoc Branch – featuring a typical oil loading rack in the oil fields.

• And, while not really a "railroad" feature, I also wanted to include a corner of the historic long-gone motor raceway, which was adjacent the PCRy's SLO yard.

Early on, I had constructed and installed bare light-weight baseboards for the remaining layout sections beyond SLO (***Photo 1***) and the return loop in the closet and completed a loop of standard gauge track crossing these baseboards representing the Southern Pacific mainline through San Luis Obispo as shown in ***Figure 2*** (described in the May/June 2022 issue). As with the previously constructed sections, these would be supported on an around-the-room shelf made from 1×2 stringers supported on wall-mounted steel shelf angles. (***Photo 2***) Each baseboard includes a 12VDC bus and a mainline bus with drops from all the track sections. Emulating NTRAK practices, the buses have Tamiya-style plugs and sockets between the baseboards. Fascia-mounted throttle sockets can be connected to the layout with wye-cables at those locations and can be easily moved if necessary. Turnout controls actuating MTB low-profile switch machines are built into the fascia of the baseboard containing the turnout to be operated. (See Sep/Oct 2020 *N-Scale Magazine* for typical details on the switch machine and fascia

pushbutton installation.) The LDEs listed above have been incorporated into the plan for these baseboards, resulting in the final plan for the current configuration of the layout shown in ***Figure 5***. In this and the next installment, I will describe the planning and construction of the first of these sections beyond the San Luis Obispo yard – the Hadley Junction section of the layout – which is 80-90% complete, lacking some final detailing and more "landscaping."

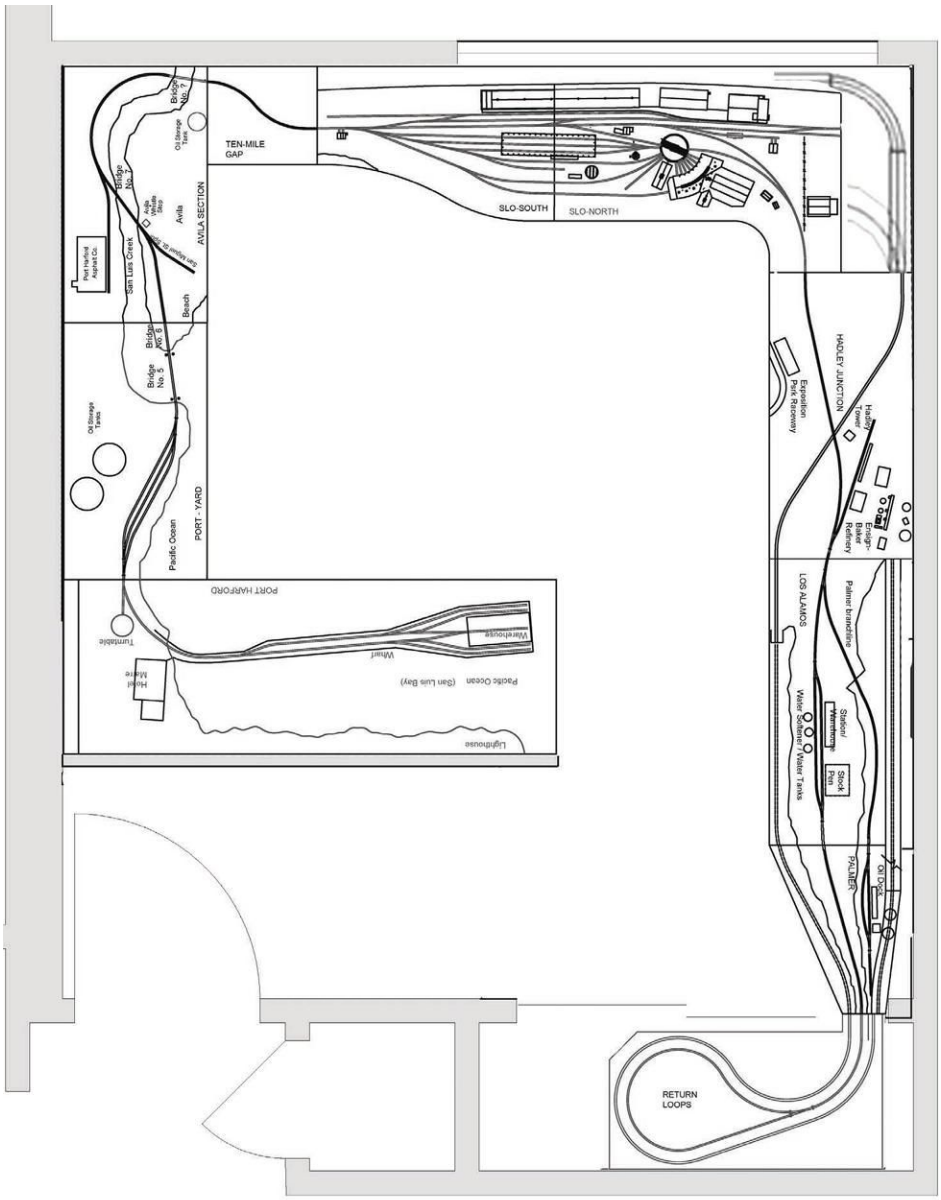


Figure 5: The current track plan incorporating the sections previously identified as "TBD." Not shown is the lower level of the standard-gauge loop and the multi-gauge test tracks shelf.

HADLEY JUNCTION

Some 7.55 miles south of the PCRy's San Luis Obispo depot is Hadley. When the SP arrived at this location in 1894, it constructed a tower and derail to protect the crossing – a condition insisted upon by the PCRy[1]. This crossing was the location of two refineries – the California Liquid Asphalt Company and the Ensign-Baker Company refineries served concurrently by the PCRy and the SP. (***Photo 3***) With the spur to the Southern Pacific station eliminated from this configuration of the layout, I "moved" Hadley some seven miles north to the next section of the layout just beyond the PCRy's SLO yard.

Key to this section of the layout is the crossing track work. Being unsure of my ability to successfully hand-lay this crossing, I modified an Atlas 60° crossing, cutting one leg down the middle and re-assembling using PC ties on an ⅛" thick base – the same thickness as the standard gauge roadbed. Like the SP standard gauge track, the crossing is Code 55. (While not pretty on the bench, it looked fine when it was weathered and ballasted – ***Photo 4***). Track from where the PCRy mainline exits the SLO section transitions from Code 40 hand-laid to PECO Code 60 flex-track (modified where it mates with Code 55 at the crossing and at some Code 55 turnouts). I isolated the crossing from both the standard-gauge (SP) and narrow-gauge (PCRy) tracks and wired the crossing to a 4PDT-3 position 12 pin center-off toggle switch (amazing what you can find on Amazon) which can power the crossing from either of the two independent throttle sources, as well as change the aspect of the light on a semaphore signal on the SP mainline to provide a visual indication of how the crossing is powered: red if the narrow gauge is powered, green for the standard gauge, off if the crossing is unpowered. (***Photo 5***) The semaphore signal is a Showcase Miniatures kit with one of their multi-color LEDs installed. Anticipating my ham-fisted track cleaning could potentially damage the signal, I devised a "breakaway" mounting, using three magnets to both secure the signal in place and provide the electrical connection for the LED circuit (***Photo 6***).

In my compressed scene, I have included an "imagineered" Ensign-Baker refinery served solely by the PCRy and omitted the asphalt company – an industry I have already modeled on the layout along San Luis Creek (July/August 2019 *N-Scale Magazine*). There is an aerial photo of this refinery in the book *The Pacific Coast Railway: Central California's Premiere Narrow Gauge*[1] but little detail. I decided to use structures from my previously modeled California Star Oil Works refinery (Mar/Apr 2018 *N-Scale Magazine*). This early refinery had the equipment to produce kerosene, lubricating oil, and other products which could have been sold at the Pacific Coast Coal Company yard across South Street from the PCRy offices in

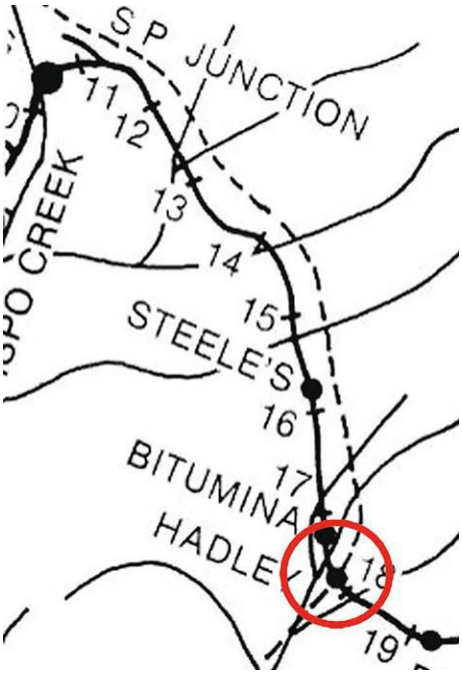


Figure 6: Hadley Junction, at milepost 17.91 (measured from the wharf at Port San Luis) south of San Luis Obispo, where the SP and PCRy cross.

San Luis Obispo. The original model included not only the original three-still refinery, but a later spur and oil loading rack, with the elements spread out across the site in Santa Clarita, California. Test fitting the refinery, siding and crossing to the limited real estate (***Photo 7***) revealed the necessity of re-arranging the refinery elements as shown in ***Figure 7*** as I finalized the track plan for the section (***Figure 8***).

With the recycled elements of the refinery installed, I proceeded to add the terrain and scenery elements. I am fortunate that the environment of the railway I chose to model is fairly simple, so I am not challenged to create the kind of wonderous and highly detailed scenery featured on other layouts, which have appeared in this publication! (A "Good Thing" as such scenery is beyond my skill level and powers of imagination.) The characteristic California grass-covered rolling hills in this and both the previous and the following two layout sections were modeled with carved recycled Styrofoam "bead-board" packing material covered first with Celluclay, then tinted spackle and Zip-texturing for "dirt" areas, and Busch 7214 "Kornfeld" grass mat for tall grass areas with Woodland Scenics "Harvest Gold" static grass transitioning from the grass mat areas to "dirt." The edges of the grass mats at these transitions, as well as along the railroad tracks, were trimmed using a Wahl beard trimmer, which was also used to randomly trim the tall grass fibers to create a more natural look. Shrubs are being added here and there, as well as Live Oak and Valley Oak trees made from JTT Sycamore tree kits. (See the Mar/Apr 2021 issue for my method of installing the grass mats, and the Jul/Aug 2022 issue for

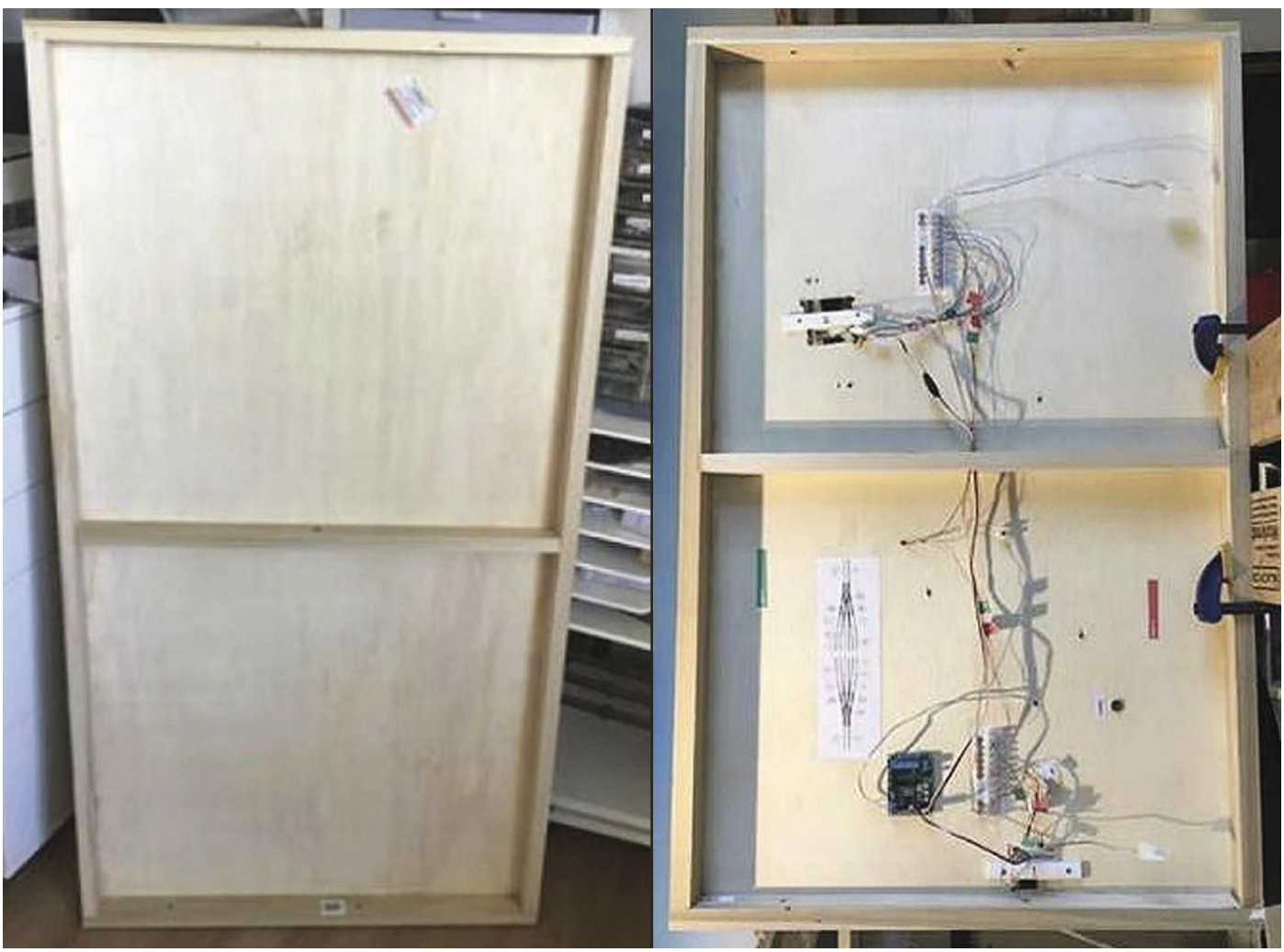


Photo 1: Typical layout baseboards: *left*: basic frame of 1 x 2 with $^{3}/_{16}$" ply top; *right*: typical electrical wiring.



Photo 2: Around-the-room 1×2 stringer "shelf" which supports layout sections is supported by 21" steel shelf angles attached to the wall.

more on modeling the Oak trees.) In creating this typical California scenery, I was guided by some images I downloaded from the internet, printed, and taped to the layout fascia. (***Photo 8***) I am still adding details such as telephone poles, fencing, shrubs and cattle.

The narrow gauge mainline beyond the crossing continues through a Peter Wright turnout, and on to the next baseboard. The turnout serves the spur to the tank car loading rack, as well as a warehouse and loading dock at the Ensign-Baker refinery for locally marketed commodities such as kerosene, lamp oil, and light lubricating oil. (***Photo 9***) As with all the other turnouts on the layout, it is thrown by a low-profile MTB geared switch machine actuated by a pushbutton in the section fascia.

Prominent on this section are two

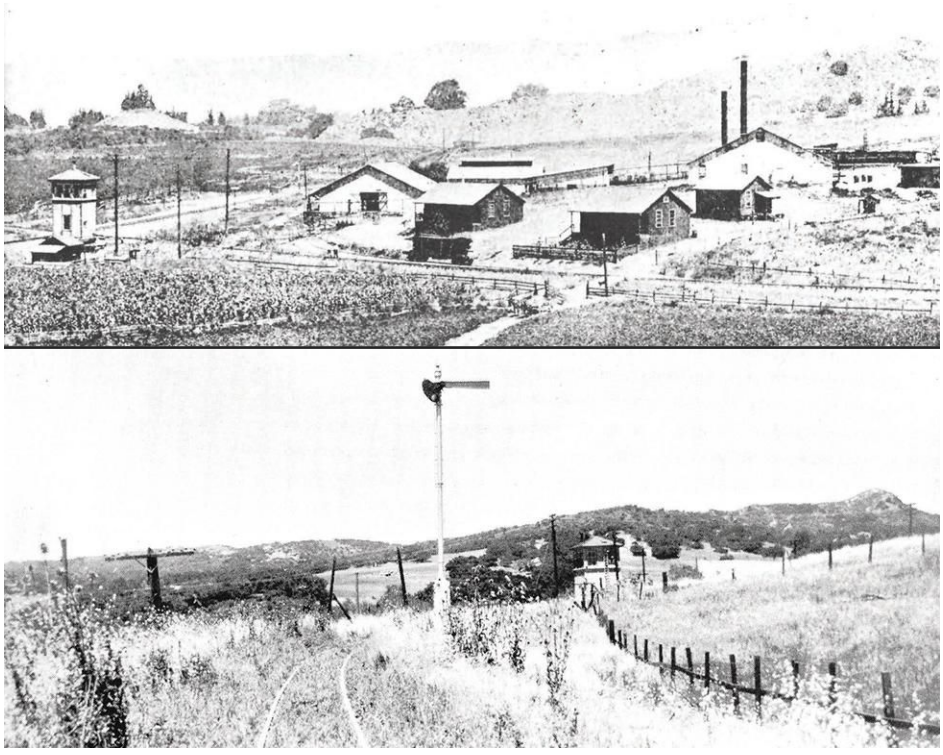


Photo 3: *Top*: Hadley Junction, showing the Ensign-Baker refinery and the tower; *bottom*: the semaphore on the approach to the junction, with the tower in the background. (from *The Pacific Coast Railway: Central California's Premiere Narrow Gauge*[1] courtesy Benchmark Publications)

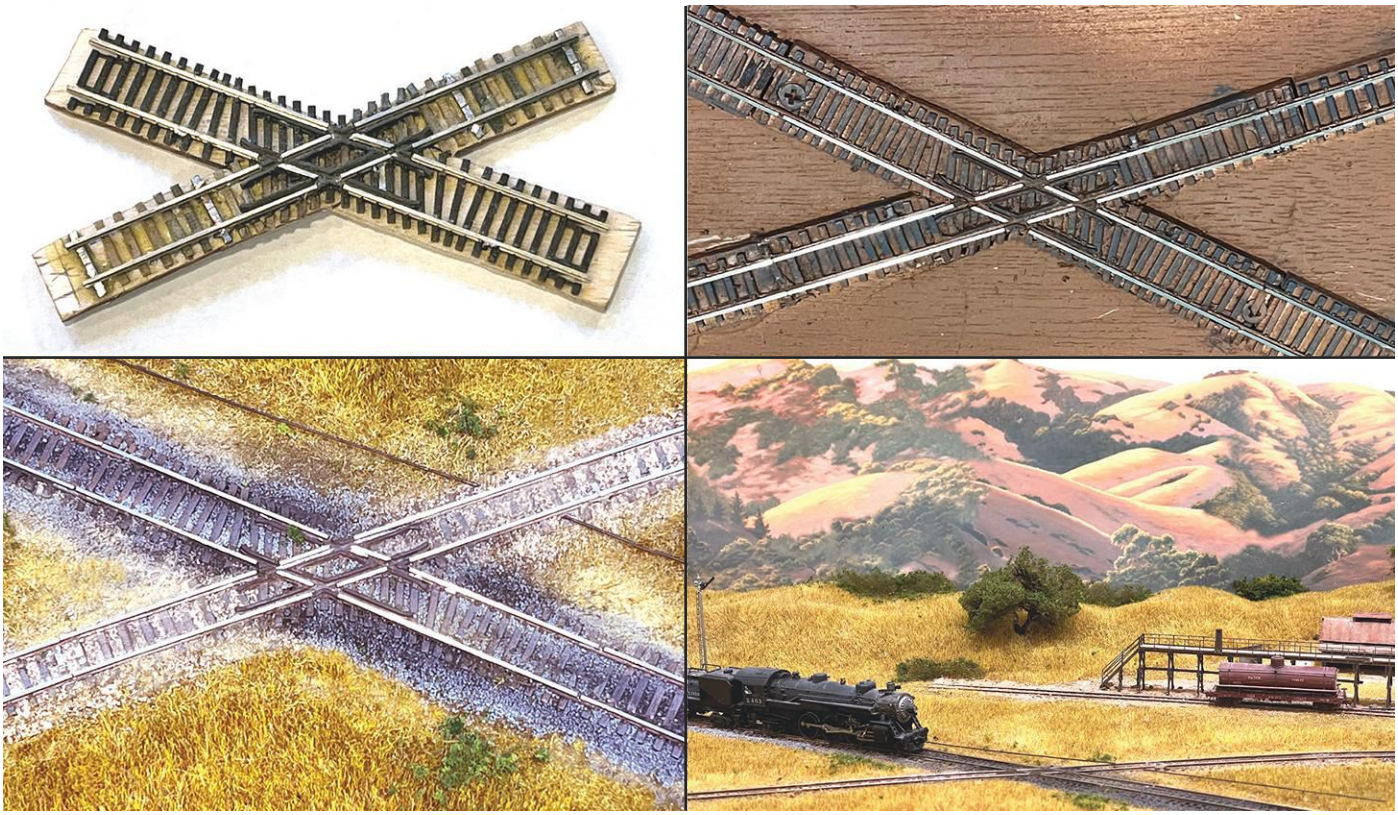


Photo 4 –Hadley Junction Crossing: *top left*: modified Atlas 60° Code 55 crossing; *top right*: installed on baseboard, with approaching tracks; *bottom left*: top view after installing, weathering and ballasting; *bottom right*: as typically viewed.



Photo 5: The switch (*left center*) for controlling the power distribution to the crossing, recessed into the section's fascia. (To its right is one of the narrow-gauge throttle connection panels.)

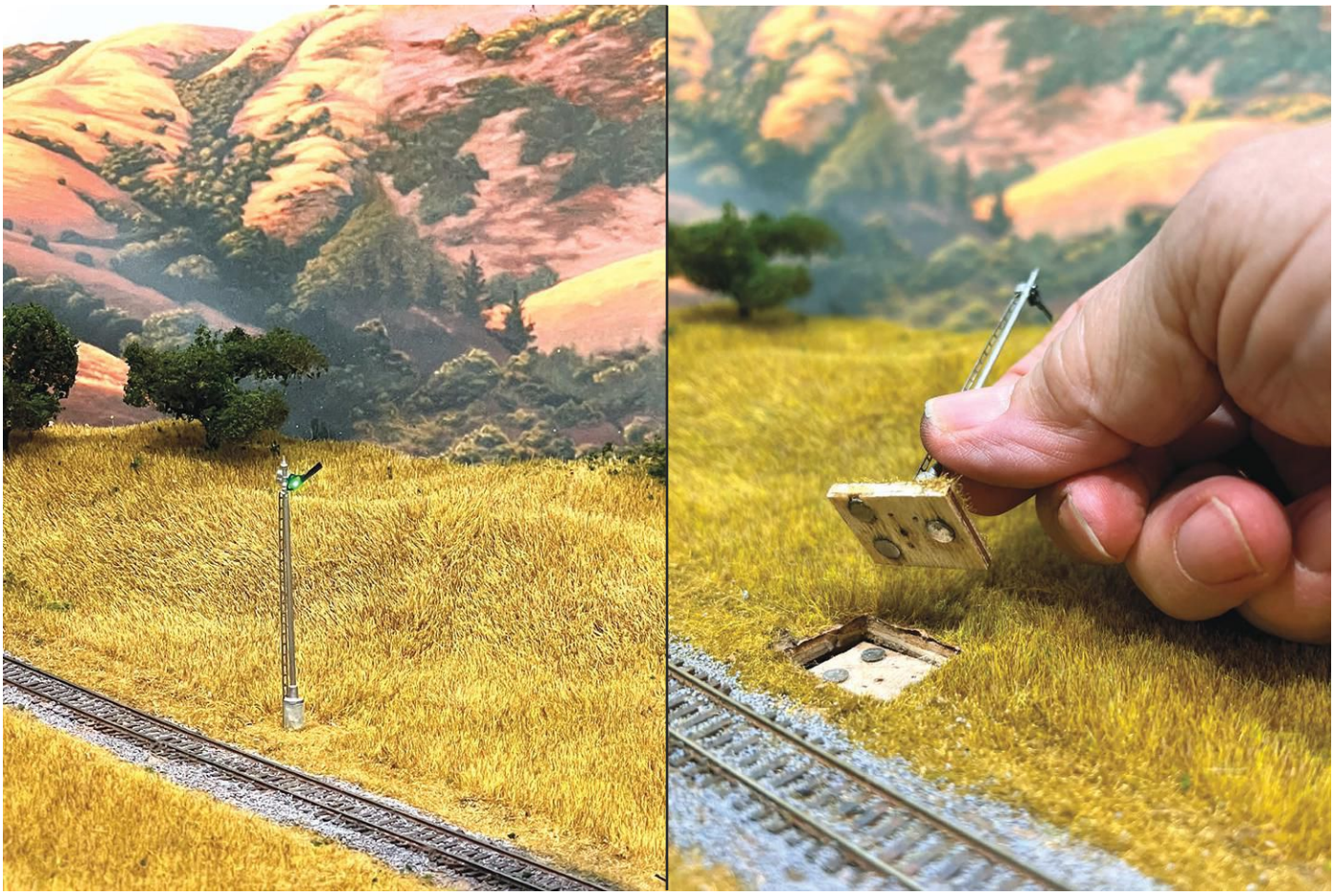


Photo 6: The semaphore signal: *left*: in place and signaling the crossing is set to standard gauge power; *right*: "break-away" magnetic base.

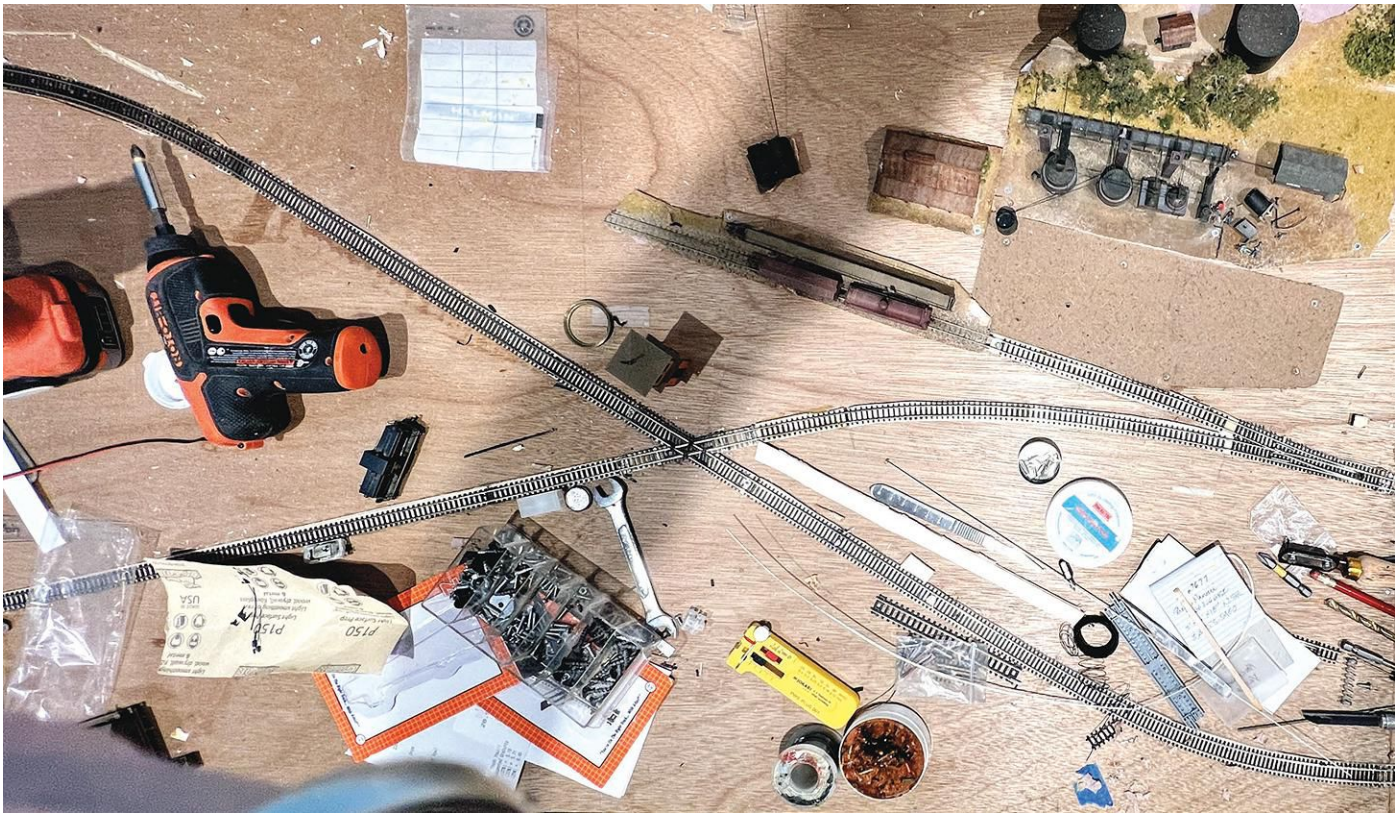


Photo 7: An "aerial" photo showing arranging the Star Oil Works structures – representing the Ensign-Baker refinery – and both standard gauge (9mm) and narrow gauge (6.5mm) track on the Hadley Section baseboard.

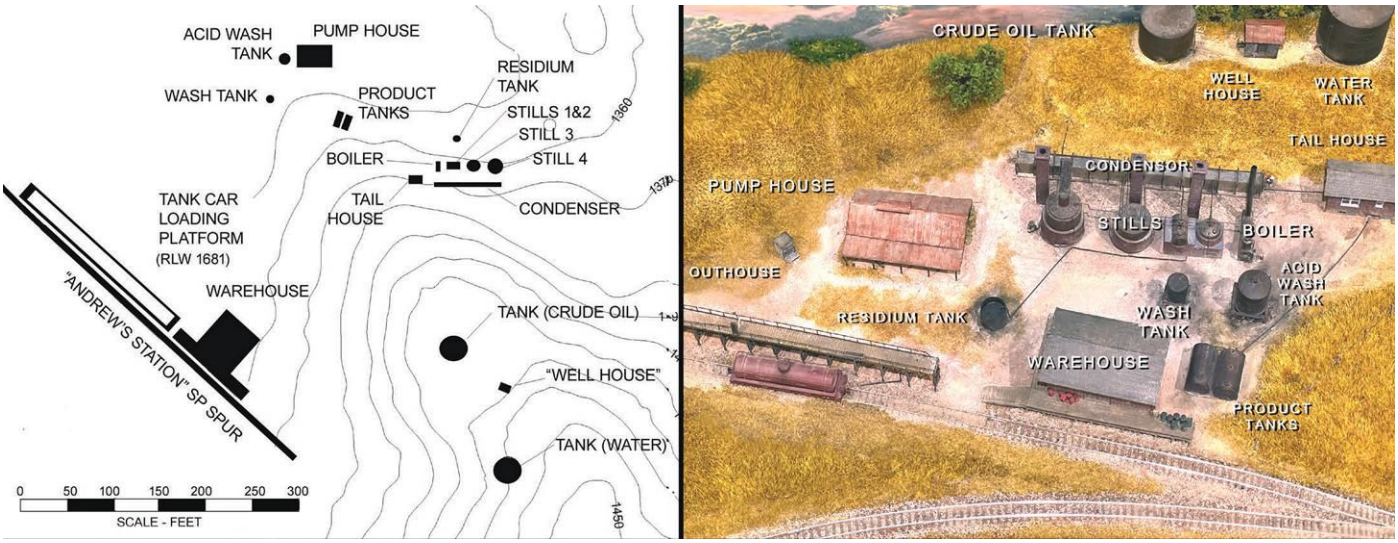


Figure 7: *Left*: the California Star Oil Works site plan from the Republic Locomotive Works kit instructions; *right*: the refinery elements re-arranged to fit the Hadley layout section.

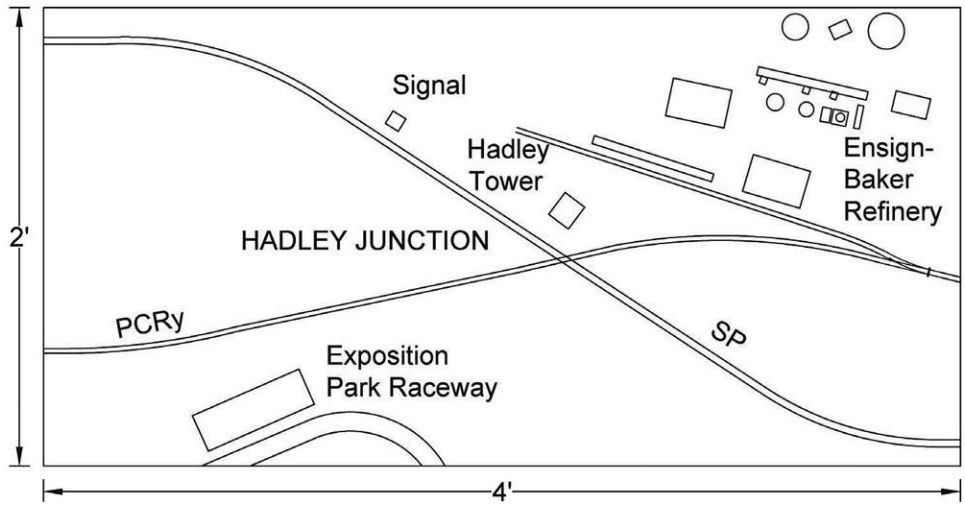


Figure 8 (*Left*): The Hadley section track plan with the reconfigured refinery: the SP standard gauge had been temporarily installed across the baseboard back in 2022; only a small portion of the Exposition Park Raceway is represented.



Photo 8: One of several reference Central Coast photos used as a reference when creating the layout scenery – still a "work in progress."



Photo 9: The Ensign-Baker Refinery spur.



Photo 10: The Kauai Model Railroaders exhibit at the Chiefess Kamakahelei Middle School annual Holiday Crafts Fair – the Lionel Christmas village is at the left end and the Nn3 layout is at the right end of the display.

roads – South Street and Broad Street. I will describe their construction, as well as that of the once-nationally-prominent 1-mile dirt auto racetrack, which was located off South Street just to the east of the PCRy's San Luis Obispo facilities in the next issue.

KAUAI MODEL RAILROADERS

As I write this, it is December and that time of year again – time for the annual Holiday Crafts Fair at Chiefess Kamakahelei Middle School and time for the Kauai Model Railroaders Christmas Model Train Display. The group had trains from Z to G scale on display, including both the signature exhibit of vintage Lionell three-rail trains chasing their tails through a Christmas village and my portable Nn3 layout. (***Photo 10***) In addition to talking to many interested young people, I gave away several copies of *N-Scale Magazine*.

FINALLY

…please e-mail me at *thomasknapp@att.net* with your comments, questions, and ideas for content. I would especially like to see the modeling of other Nn3ers out there that I could share with the readers of this magazine. Each reader out there has their own unique knowledge or skill which can be shared with the rest of us, so put pen to paper (or fingers to keyboard) and share with us. Also, manufacturers who have narrow gauge and shortline products and other products which help model the 19th and early 20th century scene, please let me know.

References:

1 *The Pacific Coast Railway: Central California's Premiere Narrow Gauge*, Johnson & Westcott, Benchmark Publications, ISBN-10: 0961546743, ISBN-13: 9780961546748, *bobhayden.com/index.php?main_page=product_info&cPath=0&products_id=28*

APARTMENT LAYOUT CARPENTRY



Photo 1: *Above*: Dremel Blueprint Portable Saw Station and Black+Decker Workmate 125; *right, top to bottom*: unfolding the Saw Station saw table and installing the portable saw in the guide rails.

Constructing model railway benchwork in a spare third-floor bedroom of an apartment or condo can present some challenges. Ideally, tools and equipment should be compact and able to be stowed away efficiently when not in use. Core to my hide-away carpentry workshop is a venerable Black+Decker Workmate 125. This not only forms a work surface when unfolded, but can securely clamp work for cutting and/or drilling. When folded up, it slides under the layout.

A more recent acquisition is a Dremel Blueprint Saw Station. This unfolds to a saw table with guides for use with the included 12V compact saw, which has enough torque to cut any and all of the lumber I have used for constructing the PCRy layout. This all folds back into itself, forming a compact case that can also be stowed under the layout.

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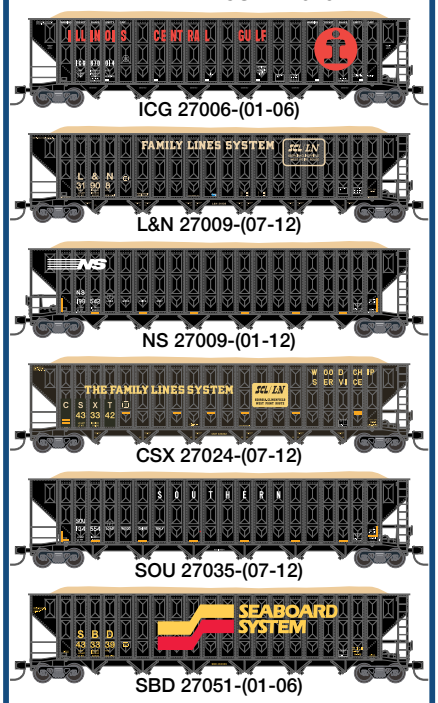
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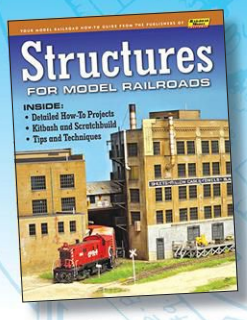
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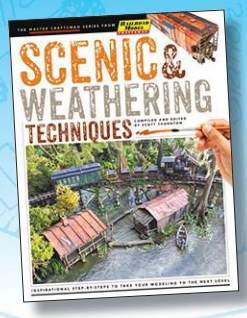
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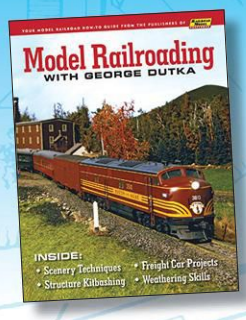
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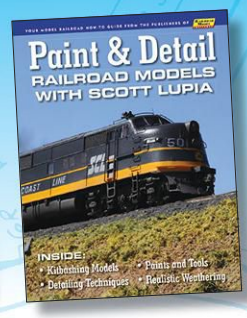
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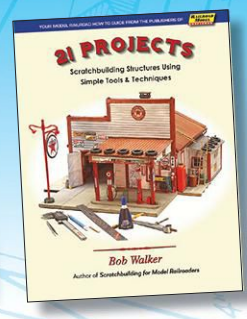
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