Mike Pagano
• Model Custom Tunnel Portals

Kim Saign
• Happy Flat Car

Todd Gamble
• A River for Black River Junction

Allen Frasch
• An Inter-Deck Elevator

Robert Sanchez
• A Visit to Bob’s World Part 2
Welcome to *N Scale Railroading* #119. I’m still new to the digital format and am mostly enjoying it. The worldwide virus situation has disrupted this magazine more than thought. I know a lot of articles are being worked on but it is when they actually arrive has become less certain. But the plan has always been to be on “passenger train schedules” and to upload new issues on the first day of each month.

The same situation has made an often chaotic product pipeline even more uncertain. But we’re in the hobby for the long run and the best blurb I’ve heard so far is, “Our parents were called to war. We are called to sit on the couch and watch Netflix. We can do this.” And we all have a great hobby.

Page 02 as the **Advertising Index**. A perfect beach from which to surf! All ads have hyperlinks to visit the advertiser’s site.

Page 13 has a very limited **New Products** section.

Page 04: Mike Pagano describes how the prototype specific tunnel portals were built for his NJ Transit T-TRAK module.

Page 14: Kim Saign always shines in April issues. This issue: Happy Flat Car!

Page 24: Todd Gamble adds the slow meandering Black River to Black River Junction.

Page 29: Al Frasch shares how he built an elevator to transfer trains between decks of his Modesto & Empire Traction layout.

Page 34: Robert Sanchez hosts Part 2 of our visit to Bob’s World.

Page 43: A very limited N Calendar

THOROUGHBRED FREIGHT

New releases “roll on” from Kato USA, with the latest production of the N scale EMD SD70ACe in Norfolk Southern paint! Last produced in 2013, these engines have special NS-prototype specific body shells to best capture the appearance of these sleek, black, modern freight engines! Today’s modelers can enjoy their powerful, DCC friendly mechanism and fully ready-to-run construction as they add these engines to their layouts this coming April!

The EMD SD70ACe is available in standard DC as well as with factory-installed DCC and Special-order DCC+Sound courtesy of a high quality ESU LokSound decoder! Order yours from your preferred hobby store today!

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Enjoy these locomotives with a variety of freight cars from Kato USA!

#106-6275 N Mixed Freight Train 6-Car Set $90
#106-4700 N ACF Covered Hopper 8-Car Set $130

Norfolk Southern SD70ACe
Number 1111 is often called the “Barcode” unit thanks to the distinctive look of the cab numbering. The tight spacing of the four digit number is unique just to this engine, and it makes it an exciting spotting feature for railfans with an interest in one-of-a-kind engines!

Modelers can of course bring this special engine to their home layouts thanks to this new release from Kato USA, in both Analog and DCC formats!
Building for T-TRAK

Modeling with Acrylic:

by Mike Pagano/ Photos by author unless noted
REEFER MADNESS!

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Visit www.atlasrr.com today and sign up to become an Atlas Insider! We’ll deliver all the latest Atlas news directly to your email inbox!
Building a prototype feature in a model railroad scene can be a rewarding experience. When I started the building of the Bergen Tunnel portals, anxiety was taking place as I found something so simple was now becoming very complex. I had to look for a process that would bring accurate results as I searched to replicate the portal in miniature. I've found by experience that there is a solution for almost every problem and if you preserver for the answer like I did, you will achieve your goal. My solution was using acrylics for this model.

Acrylic has been around since the 1940s and it’s mostly known and used as an alternative for glass. It can be manufactured as a transparent or opaque product. Acrylic sheets are made from 2 mm thick and up and have a wide range of uses. What makes acrylic an optimum choice for this modeling project is that it can be cut or engraved with a laser-cutting machine. This might sound a little out of reach for many but most engraving companies that make nameplates and plaques can provide this service. Let’s follow along on how I got to make my landmark detail out of a piece of acrylic sheet.

If you’re looking for information about a specific railroad subject to model, start with the computer you’re using to read this. In today’s day and age, we are connected to almost everything through the Internet. I found the original DL&W tunnel drawing by searching the Library of Congress. www.loc.gov There are other avenues you can search through like railroad historical societies, locale museums located where the subject was active, or searching in railroad books or magazines articles that sometimes include detail drawings.
As-Delivered Scheme

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02 Above. Scaled Drawing. The next step is to take the dimensional architecture information and create a digital drawing that can be used on a computer. Fortunately I can draw in a CAD program and recreated the tunnel portal on my computer. Once I had the object drawn to its true dimensions, I scaled it down to 1:160 and printed the tunnel portal on a piece of paper. I soon found out that the double track standard used in T-TRAK would not quite fit through the printed-paper tunnel template. I easily fixed this with my CAD program by enlarging the model up to 15% to accommodate the T-TRAK spacing and NMRA height clearances.
**N SCALE EMD NW2/SW7**

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NOW WITH CHRISTMAS SOUNDS! THIS NEW RUN OF SOUND EQUIPPED STOCK CARS FEATURE LIVESTOCK SOUNDS, BUT OUR CHRISTMAS CARS FEATURE THE SOUNDS OF THE SEASON—SANTA, CAROLS, REINDEER AND MORE! **IN STORES NOW.**

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03 Above. File Conversion. Using a CAD program to build a DWX file is not compatible with a computer program that operates a laser cutter but it is transferable with another programs like Corel Draw. I sent my file to a friend who transferred the information and made the line corrections as needed. My Bergen Tunnel portal is designed using several different pieces; the tunnel face, pillars, and the footings. The laser machine that was utilized in this project will easily cut acrylic of 2 mm thick. I designed the model knowing that these layers will have to be later attached with an acrylic-bonding agent. Photographed by Roger Maier.

04 Left. Laser Cutting Machines can cut (vector) or engrave (raster) on an acrylic sheet. It’s almost the same as printing a document on a laser printer. There are power settings that have to be experimented with but with each try, the process gets the results closer by adjusting the settings. One of the more challenging steps is guessing the raster lines to get a width and depth correct to provide the best look in creating the lettering and mortar lines. –Roger Maier.
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- FVM 891304 2pcs 48' Container

N SCALE RAILROADING

11

#119 APRIL 2020
05 Above. Assembly. Once all the parts are manufactured, it’s time to assemble the pieces. A thin paper layer that normally protects the sheet from scratches should be peeled off after the cutting process. Acrylics should be bonded with a compatible acrylic cement.

06 Above. Painting and Weathering. Once the tunnel portal project was assembled, I gave it coat of paint with some black washes to bring out the detail. This custom tunnel portal is compliant with the T-TRAK standard as well as great scenery feature for the model.
New Products

The Micro-Trains Line single window coach is out! Per prototype, with either 2 or 4 axle trucks. Great Northern 969 is MTL 160-00 020.

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New 3-packs of containers from Atlas!
Universal Set #1 of 53’ containers is Atlas 50 005 227.
NYK Logistics Set #1 of 45’ containers is Atlas 50 004 977
I had just finished reading an excellent article by Karl Andraschko on modeling a depressed center flat car (NSR M/J 2019). That guy really is a great modeler. But it got me to thinking, depressed center flat cars get all the attention. What about the happy center flat cars? They deserve some press too. This was the genesis of this article. Here we see a happy flat carrying a wrecked, burned tank car.

Fig 1. I didn’t have any spare depressed center flat cars so I went on a quest at a local train show. Only one vendor had any, but what they had was just what I was looking for. It was a six axle undec Bachmann. These are decent cars. I like the three axle trucks. The brake wheel and couplers are a bit beefy but we’ll change those.

Fig 2. Flip the car over and remove the trucks. They are held in with a wood screw so you’ll have to remove the center axle to access the screw. Then slice off the bolster flush with the body as shown here.
Fig 3. The original deck of this car is 49/64” wide. Cut a 25/32” wide slice of Evergreen #2040 V-groove .020” thick .040” spacing siding. The .020” thickness was chosen because it will bend easily along the contour of the body. It was too hard to calculate the needed length so just go the full width of the sheet. We’ll cut off the excess later.

Fig 4. To line up the new decking on the former bottom of the car I used a couple square blocks I had. Push the car against the blocks. Then liberally apply a solvent like Ambroid Pro-Weld to the center of the body and lightly to the underside of the V-groove styrene. Place the styrene on the car and against the blocks to keep it lined up. It dries fairly quick.
KATO CLASSIC PENNSY POWER IS BACK BIG TIME!

KATO has re-released their top-quality GG1 locomotives in Brunswick Green (that's DGLE to you Pennsy guys) and Tuscan Red. These are new road numbers from the previous run of 10 years ago. Get 'em now before they're gone! Not into Electrics? PRR E8 Diesels locomotives are expected to be released this April. The best "stuff" for your model trains is at www.nscaledivision.com

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Fig 5. One side at a time liberally apply solvent to the car body and the underside of the styrene. Use the handle of a hobby knife to force the styrene into the contour of the body. Hold it for several seconds to allow it time to dry. Repeat on the other end of the car. Then trim off the excess styrene.

Fig 6. Let's turn our attention to the trucks now. I decided to reuse the Buckeye trucks that came with the model. The side frames are a bit thick, however the relief is pretty good. Cut off the truck mounted coupler as shown on the truck on the left.

Fig 7. One quirk about the Bachmann trucks is they normally use a body mounted center pin to hold the truck with a screw to retain the truck on the pin. To accommodate this the hole in the truck is rather large. The way to retrofit these to a more conventional mounting method is shove a Micro Trains bolster plug in the hole. These were originally made to plug the large holes in the underframes of ConCor cars so you could use Kadee trucks and bolster pins.

Fig 8. Use a hot solder iron to melt the plug to the truck frame. Then trim the plug protrusion flush with the truck frame. The reason this is important is because the screw used to hold the truck on will interfere with the center axle if the plug is not trimmed.
Fig 9. Trim off the detail that was in the center of the end of the car. This is to accommodate the MT 1023 coupler we’ll be using.

Fig 10. Here is where I realized I could have done things better. If I had drilled the hole for the coupler before I put the new styrene deck on I could have drilled through with no concerns. But the deck was already on so I slide a thin brass strip in the gap between the new deck and the body to prevent the bit from going through the deck. Use a MT 1023 to determine how far the hole should be from the end of the car. Then determine the side to side center of the car to place the hole. Use a #63 bit so there is plenty of material to thread the 00-90 screw into.
Fig 11. Lightly sand off the details on the former deck, now the underside of the car. Then mount MT 1023 couplers using a 00-90 screw that will go through the body but not hit the underside of the new deck. Nominally the screw can penetrate 3/32” into the car without touching the deck. The screws should self tap into the plastic.

Fig 12. This is another step where I should have done this before putting the new decking on so I could just drill through instead of worrying about penetrating the deck. Select a machine screw that fits in the new bolster holes in the trucks yet allows the truck to swivel and pivot. Determine the side to side center and how close to the end you can get without the coupler interfering to drill the hole for the truck screw. Note the two holes drilled for the stirrups. Not shown here is the hole for the vertical brake wheel I added later.
Fig 13. Here we see the couplers and trucks mounted to the car. This combo of trucks and couplers will place the coupler at the correct height.

Fig 14. I felt this car needs some detail like stirrups, but how to mount them? I had several leftover MT 3001 stirrups that had one side that had been broken and thus replaced. I found I could cut the remaining stirrup off the cross piece.

Fig 15. The way they are designed is the Delrin stirrups are wider at the top than the bottom. The two holes drilled for the stirrups (Fig 12) are a little smaller than the wide part of the stirrup. I found I could use tweezers and force the stirrups in the holes. You can’t glue the Delrin, but if you use an aggressive solvent like MEK on the body it will melt the plastic around the stirrup which will hold them firmly.
Fig 16. Now it’s time to paint. Of course you can pick which ever colors that fit your railroad. I shot the whole thing black. Then used blue painters tape to mask the sides then shot the deck and trucks with my favorite rust color.

Fig 17. Being this wasn’t a prototype car I figured I’d use decals for a fictitious railroad. Unfortunately the decals are 35 years old and difficult to use now. Some weathering on the sides, deck and trucks hide the imperfections. The detail pops right out on the trucks after weathering.

**Happy Flat**

Sung to the tune of “Happy Jack” by The Who

Happy Flat wasn’t tall but he had a tan  
He lived in the yard by the tower of sand  
The rails would all sing, he took the wrong key  
So they wrote on his side with a piece of chalky

[chorus]
The shippers couldn’t hurt Flat  
They tried, tried, tried  
They dropped things on his back  
They tried, tried, tried, tried

But they couldn’t hurt Flat, or the knuckles slapping  
And they couldn’t prevent Flat from being happy

[Chorus]
The shippers couldn’t hurt Flat  
They tried, tried, tried  
They dropped things on his back  
They tried, tried, tried, tried

But they couldn’t hurt Flat, or the knuckles slapping  
And they couldn’t prevent Flat from being happy  
I saw ya!
Fig 18. We need to give this happy flat a reason to exist. So I decided to put a wrecked tank car on it. I made two stacks of ties six layers high to support the tanks car. These are pre-cut and stained ties for hand laying track. I used Aleene’s tacky glue of course to secure them. Just a dab at each crossing point holds it together.

Fig 19. I happened to have an Atlas undec tank car that was missing an end handrail. So I removed the trucks, removed the weight, and glued the bottom piece to the upper piece. With a pair of pliers I bent the ladders, stirrups, end walkways, man bars, and brake rigging so it would look like it had slid on the ground. I wanted the tank to look like it had been in a fire so there would be no need for lettering. Next I shot it with Rust-Oleum flat red primer. This is a good base for a rust color. Not show here but in the lead picture you can see the result of using a rust colored weathering powder to make it look like fresh rust. The tank was secured to the tie stacks with Aleene’s tacky glue. This was a fun project to make a happy flat and give it a purpose.
Adding a River to Black River Junction

by Todd Gamble/ Photos by author unless noted

01 Above. Black River Junction as I first saw it. Half a dozen modelers have worked here. The push pins mark the future location of catenary poles.

02 Right. Todd labors away. Image by Kirk Reddie

My wife and I visited a layout and I ended up volunteering to add the water for their Black River Junction. The prototype Black River is a slow moving, meandering, rerouted flood control river that feeds water into the Duwamish River/Estuary. It is usually low but can be very full in the spring.
03 Above. Scrape material off the river bed so it is level and without high spots.

04 Above. Vacuum all loose material and pull back any shrubbery. Be sure to place a drip cloth under the area you are working with, especially if there is more railroad beneath the river!
05 Above. Darken the river bed. The Black River is actually black and there are no rapids/ white water.

06 Above. Use a heat gun to dry the paint and thoroughly wash the area before any water is poured. This is the time to make sure that the river bed is sealed so no epoxy will find a hole and wreck havoc on whatever is below the river.
07 Above. I like to use Envirotex 2 part epoxy that is commonly available at hardware stores, etc. Since this uses 50% of each part, instead of measuring how much is removed from the containers I just make sure what it left in the containers is equal. The epoxy is carefully poured onto the river bed. Often you will want to use multiple shallow pours.

08 Above. Before another layer is poured, use the heat gun/ hair dryer to remove any tiny bubbles that might be still in the epoxy.
09 Above. Allow the epoxy to dry overnight to make sure it cures correctly.

Did you enjoy this article? If so please consider clicking here and gift Todd ~$2 so he can buy more ingredients for Cathy’s incredible chocolate chip cookies.

10 Above. This is what we have after the pour. There will be at least one more coat and then it will be time to add the lush riverside vegetation. Stay tuned!
Transport Trains Between Levels on a Home Layout

An Elevator on the N Scale

Modesto & Empire Traction

By Allen Frasch/ Photos by author

When I moved a couple of years ago, I left an 800 square foot basement where I had room for three helices. One was approximately 5 feet in diameter. In my new house, the new layout room is a small bedroom where that helix would take almost 20% of the room all by itself. Rather than try to squeeze even a small 24” radius helix into the new room, I decided to try an elevator.

I have not seen another layout with an elevator, but a friend suggested I contact Dick Roberts from the San Diego area. Dick pointed me to an article he wrote for the 2001 Model Railroad Planning issue from Kalmbach named, “Going Up!” Once I read the article, I decided that was the way to go.

The primary concepts from Dick’s article that I was able to use was to purchase good quality roller bearing drawer slides to get consistent movement for the elevator trackage and make sure they are installed on a solid foundation. Rather than placing the elevator along the trackage within the layout itself as Dick did in order to transition from one level to another along his main line, I decided to put it on the back wall of the bedroom’s closet. Herein are the thoughts and adventure that ensued.

The layout is based upon the prototype Modesto & Empire Traction, an over 100 year old shortline in California’s Central Valley that unsurprisingly runs from Modesto to Empire - a distance of about 5 miles. The entire purpose of the M&ET is to switch the Beard Industrial District, home to upwards of 100 companies, many with rail service. Thus, the layout was designed as a switching layout for the 38 industries that I chose using short trains of approximately 900 scale feet or 67.5”. This figure then established the needed length of the track on the elevator.

Any attempt to make a track connection that moves, be it a swinging door with track on the top, a lift out section or an elevator needs to be very solid. The steps and lessons learned follow.

Photo 01. Attaching the traveler to the closet wall:

I started with installing a large section of 3/4” plywood onto the studs at the back of the closet so as to have a very solid backing to the elevator. Placement of the back board within the area needs to allow for the needed movement of the elevator and to allow the traveler board to be removed from the bottom. I had to work around the closet shelf brackets, but your situation may vary.
Photo 02. Based on the width of the elevator and its weight, I felt that the elevator sliding part (aka the "traveler") would require three slides. I purchased 2 sets of 24" roller bearing drawer slides for the project.

Photo 03-04. First remove the little plastic catch that keeps the slide from coming all the way out - you will have to remove the traveler with the slides attached the next step. Yes, that means you have to be careful not to have the slides or the traveler drop to the floor - have some 2X4s, cut to appropriate lengths, around to use as temporary legs supporting the traveler while you work.

Photo 05. The fixed part of each drawer slide which is what the other rail slides in, were secured to the back wall plywood making sure the top edges were all the same distance below the top edge of the plywood and as perfectly vertical as I could get. I put one screw in the top and allowed gravity to assist there. Alignment here is critical to prevent binding when in use.

I cut another piece of 3/4" plywood the same length but only about 12" wide to use as the traveler. It has to be wide enough to be able to screw the sliding part of the drawer slide securely, but not too wide to be able to slide it entirely off the bottom in the next step. The optimal size of the traveler is a balance between being large enough to function without being too heavy (function vs. weight).

Determining the proper location for the slides on the back of the traveler proved to be a challenge. Trying to measure, transfer measurements, and then install the slides on the back of the traveler would have little chance of being exact. This measurement is critical to the smooth operation of the elevator as any error will result in the slides binding during operation. To solve the problem, I put double sided masking tape (known to golfers as grip tape) all along each sliding part (Photo 06) before mating with the fixed parts on the back wall.

Raise all the sliders to the top (using some 2X4s to hold them up in place if necessary) and then place the traveler level up against the taped slides (centering the traveler vertically with the taped slides, making sure it is high enough for the intended incoming top track), push the board onto the double sided taped sliders, carefully run the traveler all the way down and off the fixed door slides. This leaves the sliding parts taped to the back of the traveler in the exact locations where you can then affix the slides with all the screws which go into mounting holes along the width of the traveler.
Photo 07. You should then be able to insert the traveler with its sliding rails now on the back of the traveler into the wall mounted rails and move the traveler up and down with no binding. This will be too heavy to stay up by itself, so make sure you still have those 2X4s (not pictured) around to support the traveler while you finish up. You will now need to counterweight the traveler.

Photo 08. For a counterweight, I used two sets of pulleys connected to the top of the traveler via stainless steel Eye Straps (available via Amazon) (hence using nothing thinner than 3/4” plywood) running the cord up to the pulleys attached to the underside of the closet shelf and down to the floor and weighted with one gallon milk jugs. Make sure you use pulleys and string strong enough for the weight of the traveler and track assembly (from Amazon, I used National Hardware 3219BC 6 Pack 1-1/2” Zinc Plated Wall/Ceiling Mount Single Pulley). Placing the connections 25% of the way in from each end seems like an ideal spacing as each string should then handle 1/2 of the weight.

The gallon jugs are incrementally filled with water until the proper counterbalance weight was achieved. This turned out to be over 8 lbs. in my case. Use caution when tying cording to the handle of the jug as it has a tendency to cut through the handle as water (weight) is added. Once the proper weight is established a more solid material should replace the jugs. I replaced each with a 10 lb barbell.
Photo 09. Addition of track to the traveler and alignment with the layout:

Now for the track. I used right angle metal pieces that I had around, but a nice 2X4 might work just as well. The main thing is that everything must be square at all (x, y, and z) angles. The additional weight will have to be factored in for the counterweights. This was screwed to the traveler where measurements indicated the top track would approach the elevator, keeping the right angle as level as possible. I mounted a three inch wide length of 3/4” plywood to the right angle as a base, installed sub-roadbed and track.

Next come the stop blocks to ensure the elevator stops in the precise location needed. The location of the top track coming from the layout will determine where on the elevator’s rise you will need to install a stop. I used a barrel slide bolt at that point. Since all of my traffic comes onto the elevator locomotive first, I made the approaching track coming from the layout with an uphill grade of 1% or so. Thus, when the train had to back out, it would be going slightly downhill, relieving some of the stress on the locomotives and couplers and, hopefully, reducing any derails from the push.

For the bottom stop, the bottom track height from the layout was established and a stop block was installed on the back wall board about 1/2” lower than indicated. I used this distance to allow fine tuning the connection to the layout track with thin shims. (Photo 10).

Photo 10 and 11. Shims for the lower stop and getting power to the traveler:

I put power to the elevator rails via a PSX Power Shield so it was isolated from the layout. Since the wire coming to the PSX on the traveler would flex on each movement, I used good quality speaker cable anchored on the traveler board. In order to make sure the trains did not run off the end of the approaching track into the “great abyss,” the final 6” of each approach track was isolated from the layout power and connected to the elevator power. I merely ran the top power through the barrel slide bolt (Photo 11)- if it is not latched, no power. The bottom track’s last 6” is powered via a “switch” as in the pictures. I cut one track on the 6” section, ran a feeder to a metal strip that I folded into an angle which met another metal strip from the elevator power when the traveler came down to make contact - simple, and it works.
Photo 12. Not being sure of the movement of the tracks coming in from the layout due to temperature and humidity changes, I did not firmly attach the last 6” section of each track from the layout to the roadbed, but allow it to move a bit. It is aligned for each session and works well. In a typical session, the elevator will be used twice in each direction, so not a big inconvenience.

In order to keep things on the traveler track, I used Atlas rerailers the entire length and fastened a safety barrier made from masonite, but a nice plexiglass barrier would look nice too. Also, I painted the whole elevator white to merge better into the wall at the back of the closet.

Photo 13. An elevator is not for every layout, but removing the closet doors, putting the elevator on the back wall and running the layout trackage through the wall into the closet, allowed me to get about two feet more peninsula length on top and bottom levels and 5 more industries. When one is confined to a 12’X13’ room, any additional space is certainly appreciated.
In issue #118 we ended Part 1 at Ashcroft Junction. With Part 2 we take the leg of the wye that heads towards Santa Patricia. First up is Clark Hill, our name for the largest helix on the layout... and a Thing of Beauty built by Chuck Clark and Eric Olsen.
Coming out of Clark Hill we cross a bascule bridge to reach Santa Patricia, named for the artist who painted the backdrop.

Santa Patricia, served by 3 railroads, is the heart of the layout. The Southern Pacific, Santa Fe, and Western Pacific have major facilities in this area. The double track Southern Pacific mainline goes through all the yards and facilitates the large amount of interchange activity done here. The foreground is the east end of Santa Fe’s Childs Yard.
Santa Fe’s Childs Yard is in the foreground and Amtrak’s Santa Patricia station is towards the backdrop. The crew is experimenting with car cards.

The west end of Santa Fe’s Childs Yard contains their diesel fueling facilities and is next to Santa Patricia’s Bussard International Airport.
The far west end of Santa Fe’s Childs Yard’s roundhouse still stands. The area is still be upgraded with new structures.

Left. A rerun of the graphic from #118 that shows the over all view of Bob’s Word. Part 1 showed the port facilities south of Castle Yard to Ashcroft Junction. Part 2 is Ashcroft Junction to the Southern Pacific facilities beyond Santa Patricia. Part 3 will cover the area built and under construction beyond Mount Carole.
Above. The Waterstreet freight terminal can be seen among the structures near the backdrop. In the foreground are the wye tracks leading to the Waterstreet Union TOFC loading area.

Left. The Waterstreet Union TOFC loading area is a relatively new construction named after my good friend Dave Waterstreet. These kind of additions really add to the flexibility and interest to operations.
Left. Past the Waterstreet freight terminal is the SP’s commute facility.

Right. Past the Cargill elevator is the WP engine service facility. On the left side is the SP commute facility. This area is the start of a peninsula 4' wide and about 30' long that ends with the SP locomotive facility and an end loop to turn trains.
Left.
On the left is the Western Pacific’s Vanatta Yard and on the right is Southern Pacific’s Brovald Yard with the large Cargill grain terminal located so it can be served by both railroads.

Right.
The yard is light today and we caught a string of SP commuter cars waiting servicing. These images were shot during an open house and quite a variety of guest’s equipment was being run on the layout.
Left. The foreground is the west end of WP's Vanatta Yard and SP's Brovald Yard is in the distance.

Right. West of Vanatta Yard is an industrial park served by both the SP and the WP. Looks like an industrial brick structure is migrating away from the new Southern Pacific Pipelines facility.
Right. A view of the ‘bulb’ area at the end of the peninsula that contains the main SP and WP freight yards.

Did you enjoy this article? If so please consider gifting Bob ~$2. Click on this button so Bob can buy more food to feed his crew!

Left. At the end of the peninsula is the main Southern Pacific servicing tracks. Eventually 4449 will be serviced here. The Freedom Train is on display at Aragon.

For Part 3 we will restart at Ashcroft Junction.
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It will take some time to realize the potential of this new format. The past four months have been very interesting. The statistics say that as of March 31 there have been 5,279 visits to the download page. Of the total number of site ‘hits’:

- United States 79.9%
- Canada 5.5%
- Australia 2.9%
- United Kingdom 2.6%
- Germany 1.6% (We should do better!)
- Switzerland .9%
- Netherlands .9%
- Brazil .9% (A big surprise to me)
- Japan .7% (We should do better!)
- New Zealand .5%

I suppose my realistic goal was 5,000 downloads for the first issue. Some of those might be one timers downloading out of curiosity. The plan is to sustain what we have and, with help of readers, get the word out and get to 10,000 downloads per issue within several months.

It comes down to the quality of the contributors and the support of advertisers. I think we have the highest bar set for contributors and fortunately we have many quality N scale contributors. At this time they are volunteering their efforts.

Eventually there should be quality beginner support at nscalerailroadn.com. This is very important. But for now the focus is on the digital periodical *N Scale Railroading*.
See You Next Issue!

- A Visit to Bob’s World Part 3 of 3
- Over the next several issues the plan is to feature articles on an all-new layout, an update on a layout under construction, two articles on Kato F Unit chassis, scratchbuilding structures for an industrial park, modeling a riverbank, ...
- And More!