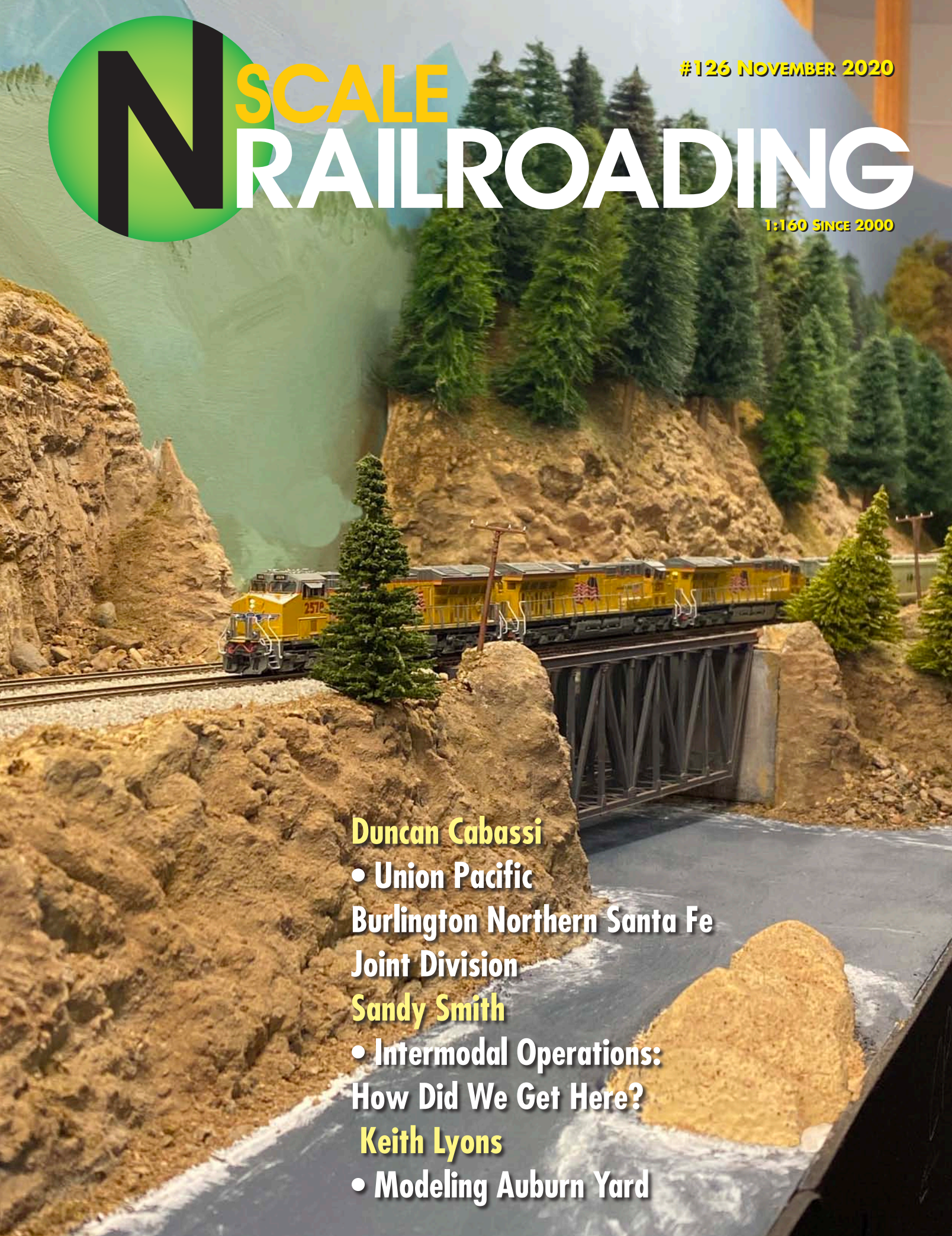

N SCALE RAILROADING

#126 November 2020

1:160 Since 2000

Duncan Cabassi
• Union Pacific
Burlington Northern Santa Fe
Joint Division

Sandy Smith
• Intermodal Operations:
How Did We Get Here?

Keith Lyons
• Modeling Auburn Yard

N SCALE RAILROADING
WELCOME!

Cover. A Union Pacific pot ash train traverses Duncan Cabassi's Union Pacific Burlington Northern Santa Fe Joint Division. See page 19.

AD INDEX

Welcome to ***N Scale Railroading*** #126, the November, 2020 issue.

Page 04. **New Products**.

Page 19. **Duncan Cabassi** shares how his operations based railroad has evolved. Making plans is inexpensive and it is impressive when someone is able to follow through and make it happen.

Page 38. Last issue I mentioned intermodal modeling as an area I would love to publish more information. **Sandy Smith** contacted me and I am glad to share some of his experiences and how he is modeling intermodal railroading.

Page 45. **Keith Lyons**. has been working on an impressive Northern Pacific layout. He has spent a lot of time on the infrastructure and upper level. In the past months he has made a huge amount of progress on his Auburn Yard, including painting up some generic structures to assist him visualize how he wants it to looking in final version.

Page 50. **NCalendar, NHorizons,** and **Observations**. ◗

N SCALE RAILROADING

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#106-0440	N E7A Two Locomotive Set - New York Central #4008 + #4022	**$230**
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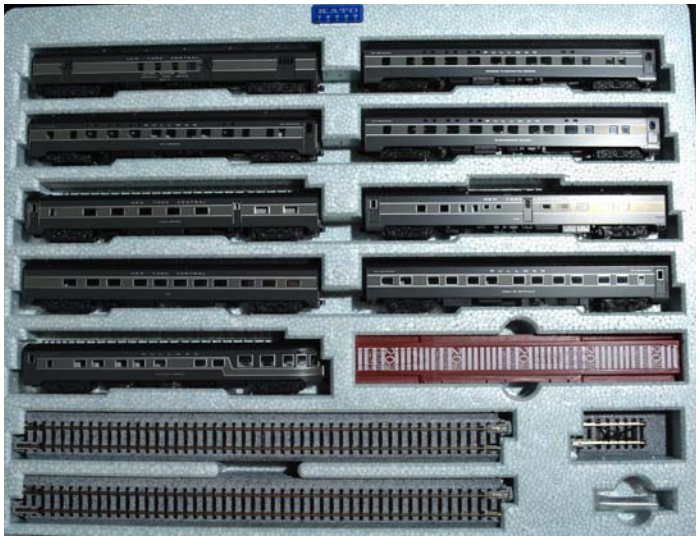
New Products

Kato's TWENTIETH CENTURY LIMITED is here! New York Central E7As 4022 and 4008 is Kato 106-0440.

Kato 106-7130 is a 4 car add on set with 4 sleepers to complete the TWENTIETH CENTURY LIMITED set.

Kato 106-100 is the 9-car TWENTIETH CENTURY LIMITED set. Along with the 106-0440 pair of locomitives and 4-car add on set 106-7130 a correct 1950 15-unit TCL, at the time the most famous train on earth.



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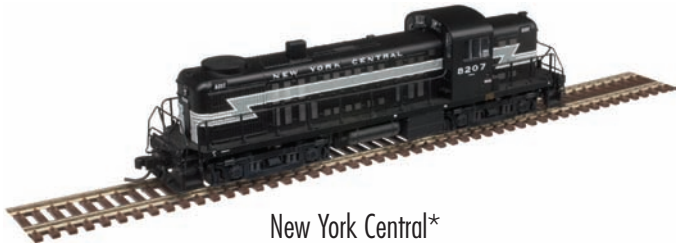

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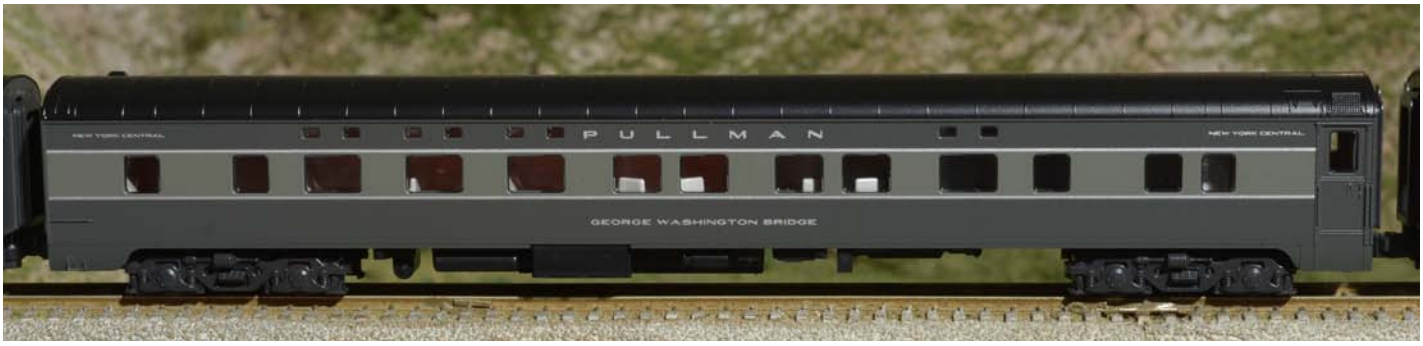
N SCALE RAILROADING
NEW PRODUCTS

NYC RPO/Baggage 5017 is from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set. Notice the 3 axles trucks.

Pullman "Chicago River" is aa 10-6 sleeper from Kato 106-7130, the 4-car sleeper add-on set. Note there were no coaches on the TCL.



Pullman "George Washington Bridge" is a 4-4-2 sleeper from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set.

Pullman "Bay Bridge" is a 4-4-2 sleeper from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set.This is the other side of a 4-4-2 sleeper.

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Pullman "Queensboro Bridge" is a 4-4-2 sleeper from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set.

NYC "Lake Shore" is the club-lounge car from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set. Below is the other side of the car.

NYC 474 is the kitchen-dormitory car from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set. Below is the other side of the car.

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NYC 401is the dining car from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set. Below is the other side of the car. Note no vestibule.

Pullman "Powder River" is aa 10-6 sleeper from Kato 106-7130, the 4-car sleeper add-on set.

Pullman "Port of Boston" is aa 12 Bedroom sleeper from Kato 106-7130, the 4-car sleeper add-on set.

N SCALE RAILROADING
NEW PRODUCTS

Pullman "Port of Albany" is a 12 bedroom sleeper from Kato 106-7130, the 4-car sleeper add-on set. This is the airlse side of the 12 bedroom car.

Pullman "Port of Buffalo" is a 12 bedroom sleeper from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set.

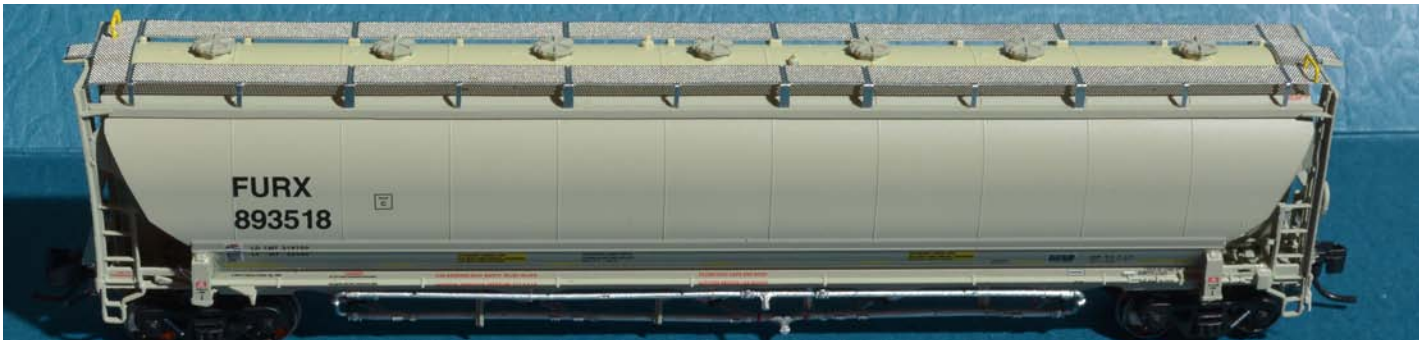
Once upon a time, long ago, back when US railroads were trying: Many of the best trains had a signature observation car. Pullman "Hickory Creek" is a 5 bedroom lounge observation car from Kato 106-100, the 9-car TWENTIETH CENTURY LIMITED set. Below is the aisle side.

New Products

Phase II GP39-2 BNSF 2711 is Atlas 40 004 798. Notice all the fine lettering like the "GP39-2" on the lower yellow stripe. All of all the little plates along the orange stripe.

New Products

First Union Rail (FURX) 893518 is Atlas 50 004 321.Above is the side with the piping. Below is the other side.



Above is a view of the fine detail of the roof. Brelow is detail of the underside.

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NEW PRODUCTS

Above is the three Hamburg Sud 40' refrigerator containers (set #1) of Atlas 50 005 351. Look at the details!

Right. The Atlas containers come in a three pack of refrigerator containers. This is the Hamburg Sud set #1 Atlas 50 005 351.

Above is the three "K" Line 40' refrigerator containers of Atlas 50 005 354. This is the second set of 3. Look at the details!

Left is the three NYK Logistics & Megacarrer 40' refrigerator containers set #1 of Atlas 50 005 355. Still more details!

Duncan Cabassi's

The UPBNSF Joint Division

By Duncan Cabassi/ Photos by the author.

Image 01. The BNSF is switching out the industries of Millwood, Spokane whilst a UP Intermodal Westbound train rumbles through on the Mainline. Here the UP and BNSF share trackage rights.

Duncan Cabassi's N scale UPBNSF Joint Division is an operating layout that has continually evolve since its beginning in 2006.

Layout Statistics

Layout Size: 57' x 29' 6" across 2 separate layout rooms: Layout Building 1 (LR1) and Layout Building 2 (LR2). The double deck layout is connected by 3 removal sections. The layout has two helices. LR2 has a branch line built on 2 roll in, roll out sections.

The mainline is 450' long.

The layout"s era is 2005 on.

Prototype: Union Pacific and Burlington Northern Santa Fe

Area Modelled: The Union Pacific from Portland, Oregon to North of Spokane, Washington.

Control System: Digitrax DCC, with 8 power districts,

Turnout Control: 95% turnouts are controlled by switches on the fascia via Tortoise or equivalent switch machines.

Signaling and other funky electronics will be determined in the future.

Operation: Currently the layout is "operated as a transportation system" about 6 times a year.

Car forwarding is done by JMRI Ops Pro with an additional software enhancement

- Trains across the layout are controlled by a dispatcher using two-way radio communications.
- Traffic flow and schedule are dictated by the Operations manager.
- The layout can accommodate 20+ operators. However the sweet spot is 14 -16 operators.
- Freight trains including through, manifest, and locals and unit trains per prototype practices.

Layout Timeline.

In 2006, due to a career move, I relocated to another city. Once we settled in the new role and new location, I found and purchased a house that served the family purpose well. However, saying this, I do believe the main attraction of the house for me was the fact that it had a separate 26' x 19 1/2' garage (LR1) that spelled out LAYOUT ROOM!

This brought about a new era for my hobby. Using the lessons learnt from previous layouts, I now had the opportunity to Plan, Design and Build that dream layout.

There were several positive factor to building my dream layout. Some of these were: I was now a reasonably experienced modeler; I was old enough to have started to formulate what I liked and what I didn't within the hobby; I could use new materials and techniques across the layout; I was now aware of where and what I wanted to model; and I now had a network of modelers that I could tap into to do operations, which was my ultimate model railroading goal.

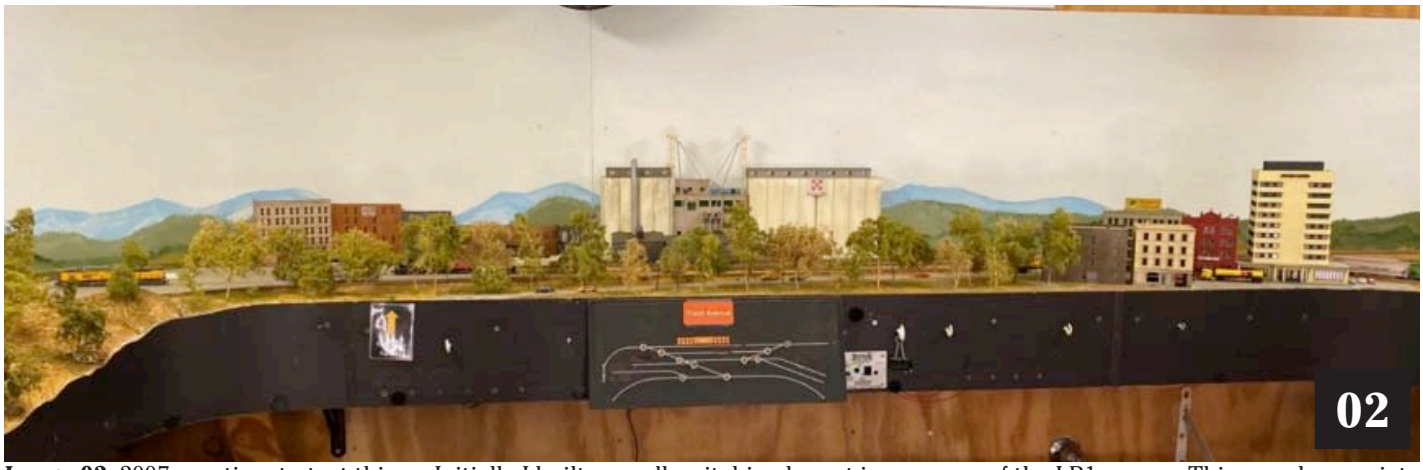


Image 02. 2007 was time to test things. Initially I built a small switching layout in one area of the LR1 garage. This was done quiet specifically to test Atlas and Microengineering track and turnouts as well as different styles of turnout throw mechanisms. I ran trains on this for a couple of months. I also invited others to come over so I could observe their reactions.
The switching layout was subsequently expanded from either end to accommodate larger operations. To the East of the switching area I installed a shelf. This would become the East Staging yard. To the West of the switching area I extended the layout into a 9' 8" x 6' 6" m recessed area of the LR1 garage.

Image 03. This 19 1/2' section along the garage wall to the left of the original switching section become Yardley, the main classification yard on the layout.

In 2012 my life's circumstances changed significantly. This left me with the thought that, you guessed it, I would do another expansion.

This time the plans were grandiose but very clear to me. I now firmly had my goals set on tripling the size of my layout over a period of the next few years and I had a clear vision of what I needed to do and how I was going to do it. This would end up being what I call the phased approach.

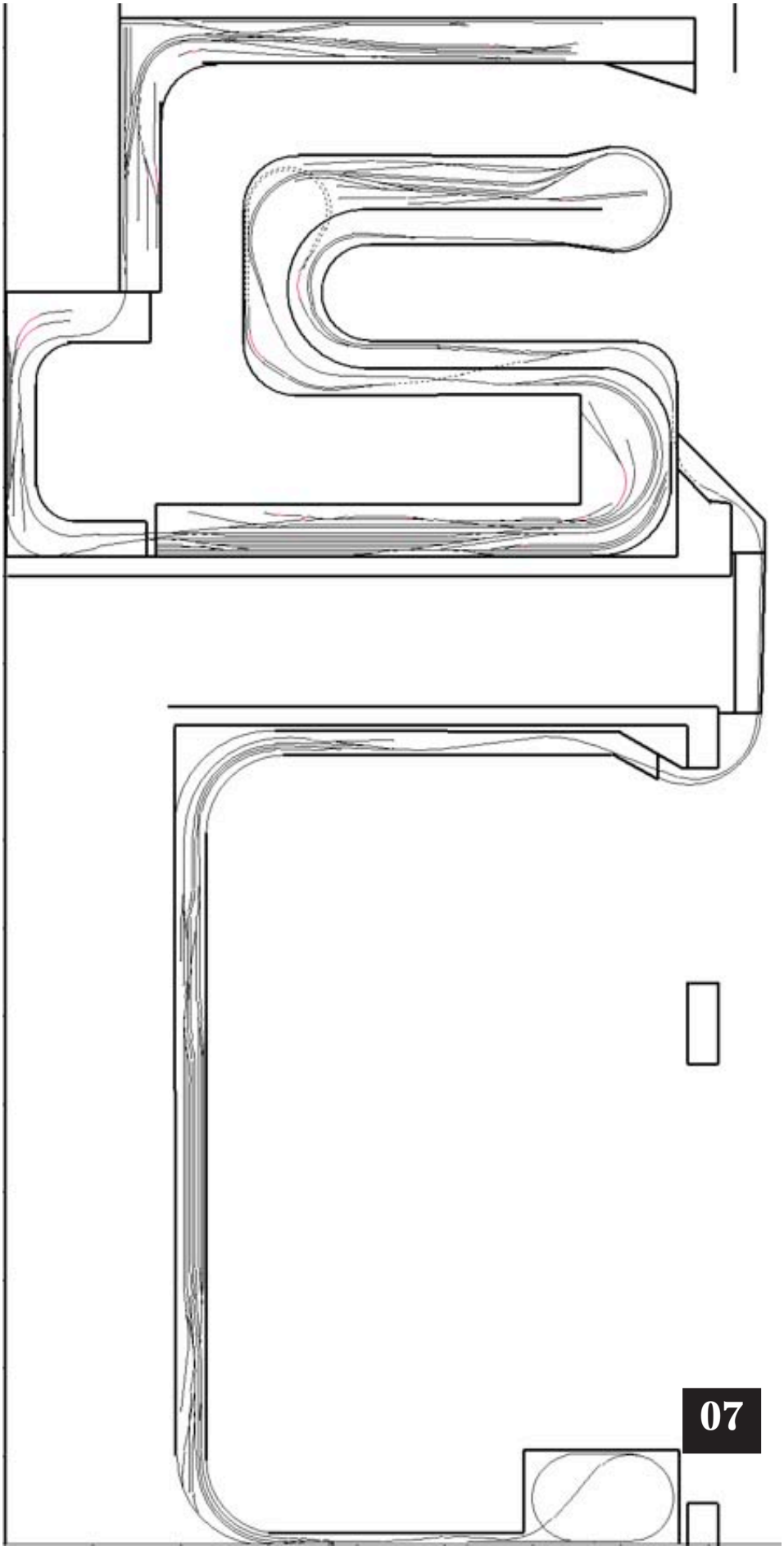
My approach was to extend the layout into the house garage LR2. I designed, constructed and installed 3 removable sections to "Bridge the Gap" between the two garages. Once this was achieved, benchwork and track laying was expedited as I had some exhibition layout sections ready to install into LR2. West staging was located at the end of the top deck. This was the next end of the line and would remain this way whilst testing of the layout continued. In 2013 phase 2 commenced. I relocated the West staging yard from the upper deck, to the opposite end of the LR2 on the lower deck. I then removed the abandoned helix from under the original layout in LR1 and repositioned this at the very end of the layout in LR2 where west staging was previously located. (Photo 05)

This is where I tie the upper and lower decks together with the helix. Constructing the connecting modules for the lower and upper decks went quickly and within a month the layout

Image 04. The three removable sections that join the two layout buildings together. This view is prior to scenery.

was back in operation. I had now added the Boardman industrial area (Photo 06).

In 2013 I became aware that my layout would be on the layout tours program for the Australian 2015 N Scale convention. From this point I decided to focus my attention to scenery and electrics, so for the next 2 years (which ended up being 5 years), there was no more expansion of the JD.



In 2018 the expansion bug hit me again and I decided that I would perform phase 3 of the expansion. Now what started out as phase 3, ended up being phase 3, 4 & 5 over a period of 18 months.

First off in January 2018 with the help of my good mate Trevor Phillips, we relocated West Staging back into LR1, under Yardley Yard.

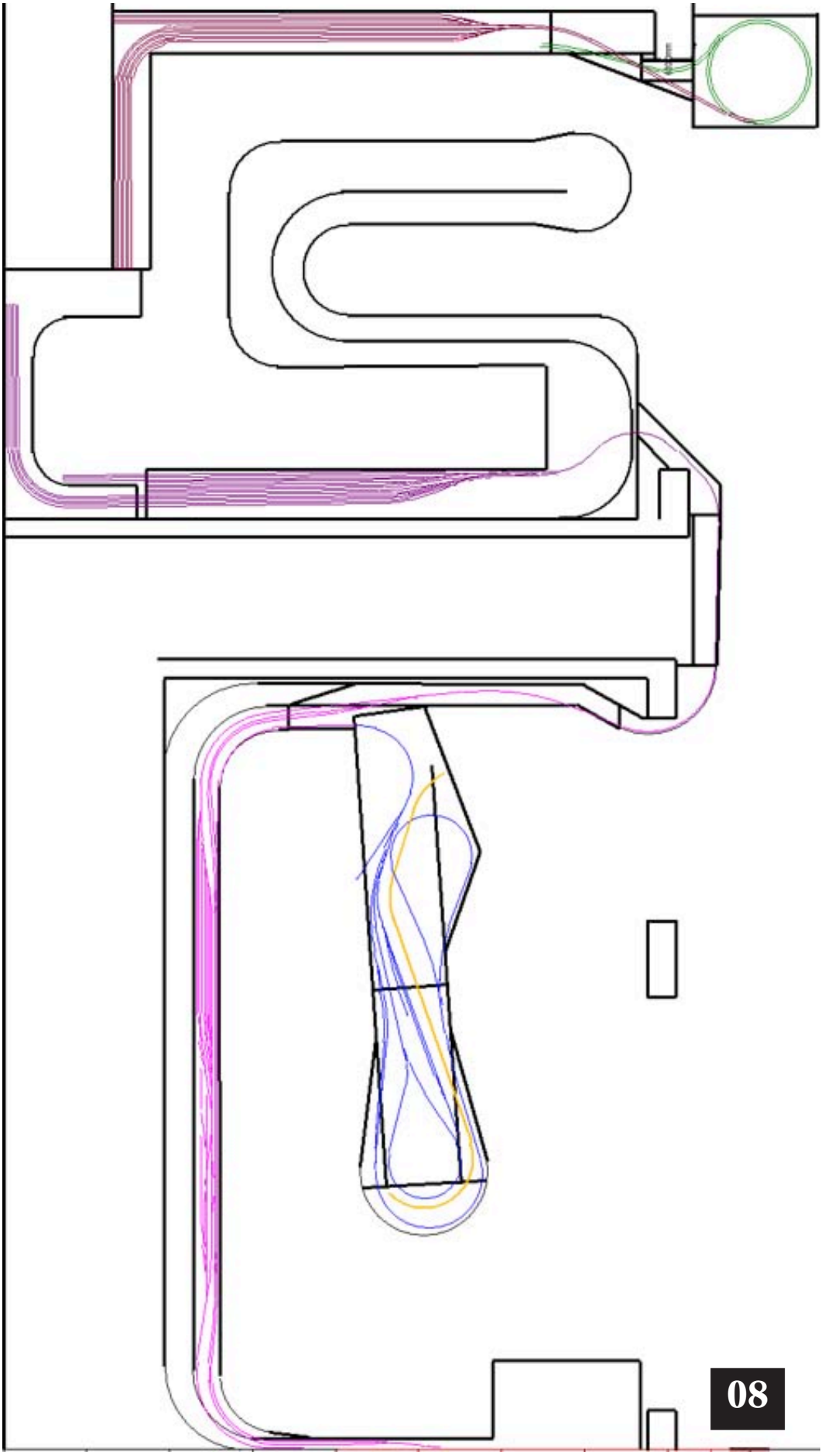
As this had already been planned for previously, the benchwork was already ¾ completed. Within 1 week I had trains back up and running on the lower deck.

Then without taking a breath, I commenced construction of the "Rogers Run" branch line, which became phase 4.

I envisaged this engineering gem to add another operational dynamic to my layout. Thus far it has not disappointed. It now provides an avenue for online inter industry exchange of products. It has a power plant, bio-fuels plant and limestone crushing plant to name but a few of the industries on the branch line. The construction took some planning and engineering as I had to maintain the ability to park two vehicles in the garage when not in operation. Remember those golden rules!
I achieved this by having two removable sections that bolt together and connect back into the main layout. Vehicles are obviously not in the shed when I'm operating the layout. However, when we are not operating the layout, the sections are disconnected and rolled out of the way to allow vehicle access. The Rogers run branch line has been a significant operational enhancement in adding interest to our operations sessions. Rogers run was officially opened in July 2018.

Phase 5, the last but not the least ambitious project. This saw the relocation of the East staging yard from its location on the upper deck, to the

Image 07. The Upper Deck.



lower deck and lengthened to accommodate the long unit trains I run on the layout. The photos show the layout as it currently is.

The effort to do phase 5 and have the layout back up and running in November 2019 was a large undertaking. It is now running and I'm enjoying every minute of it.

Last but not least. The satisfaction I get of watching a group of 15-20 people, spread out and operating my layout, several trains running at once, the transportation system working as I perceive it should, the railroad communications chatter on the radios, and the smiles on their faces! - makes this effort all worthwhile.

I would like to thank all those who have helped me achieve a layout that I'm proud of. I still have a long way to go but would not be here if I did not have the encouragement and support of the operations crew on the UPBNSF Joint Division and my family who put up with my passion for this hobby.

Image 08. The Lower Deck.

Image 09. Layout Room 2 (LR 2) with the rolling modules (Rogers Run) connected.

Image 10. Boardman on the lower Deck and Wallula on the upper deck.

Image 11. West staging situated below Yardley Yard. West staging represents Portland's Albina and Lakes Yards.

Image 12. Looking across Rogers run to the guys who are switching out Wallula and Boardman areas.

Image 13.: Shows the relocated East staging that is now on the lower deck (This used to be on the upper deck above its current location.) East staging depicts East port (UP) and Sandpoint (BNSF).

Image 14. Eastbound CP Manifest train crossing Dry Reach creek.

Image 15. UP Westbound Potash train on the main leaving Cheney.

Image 16. UP Westbound Potash train crossing Dry Reach Creek.

Image 17. LP Westbound Potash train" Rounding the curve after Palouse Junction. (Nearing Joso Trestle.)

Image 18. UP Westbound Potash train Crossing Joso trestle. (The removable section between the two buildings.)

Image 19. UP Westbound Potash train Crossing Joso trestle. (The removable section between the two buildings.)

Image 20. UP Westbound Potash train Crossing Joso trestle. (The removable section between the two buildings.)

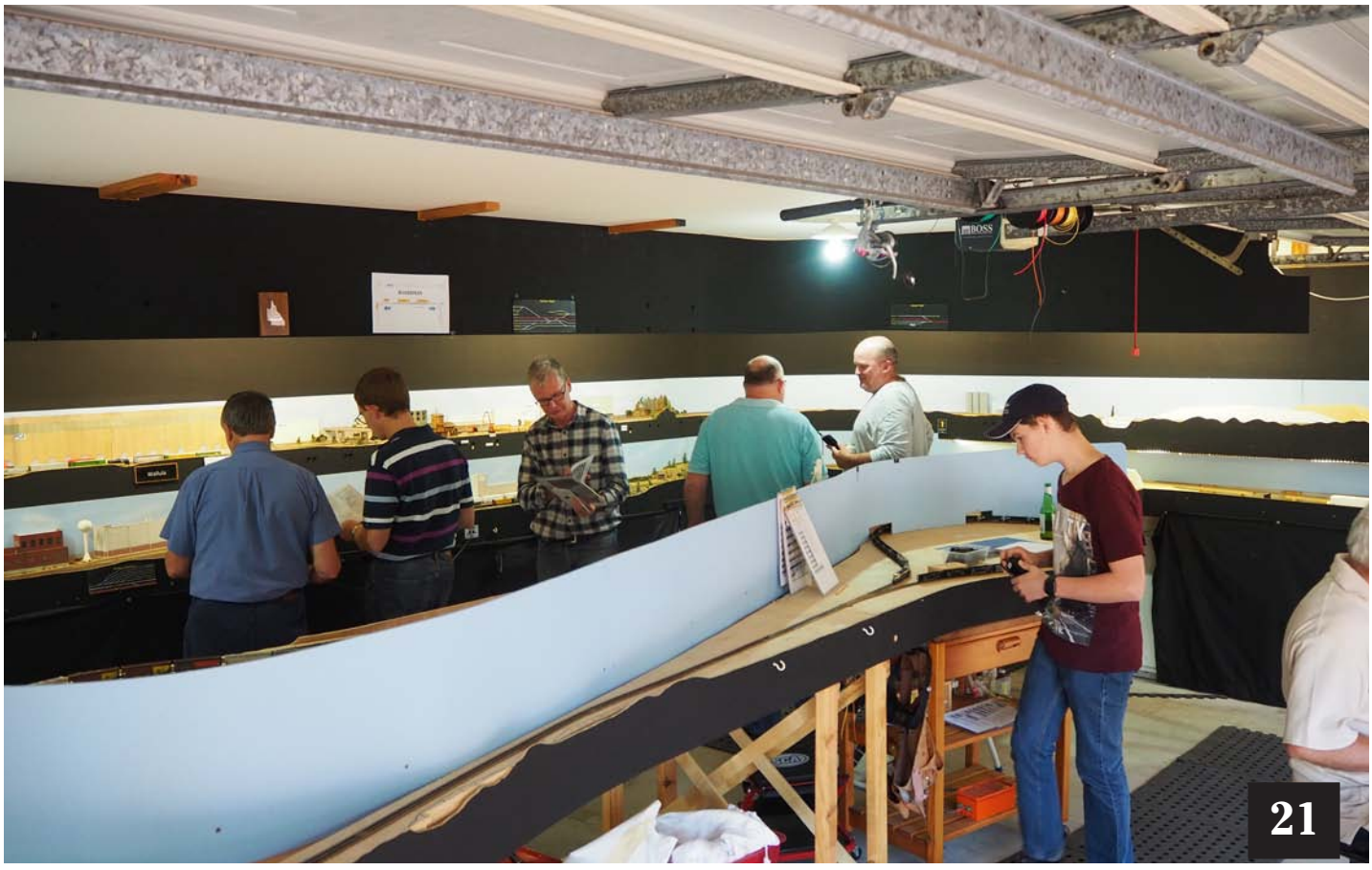


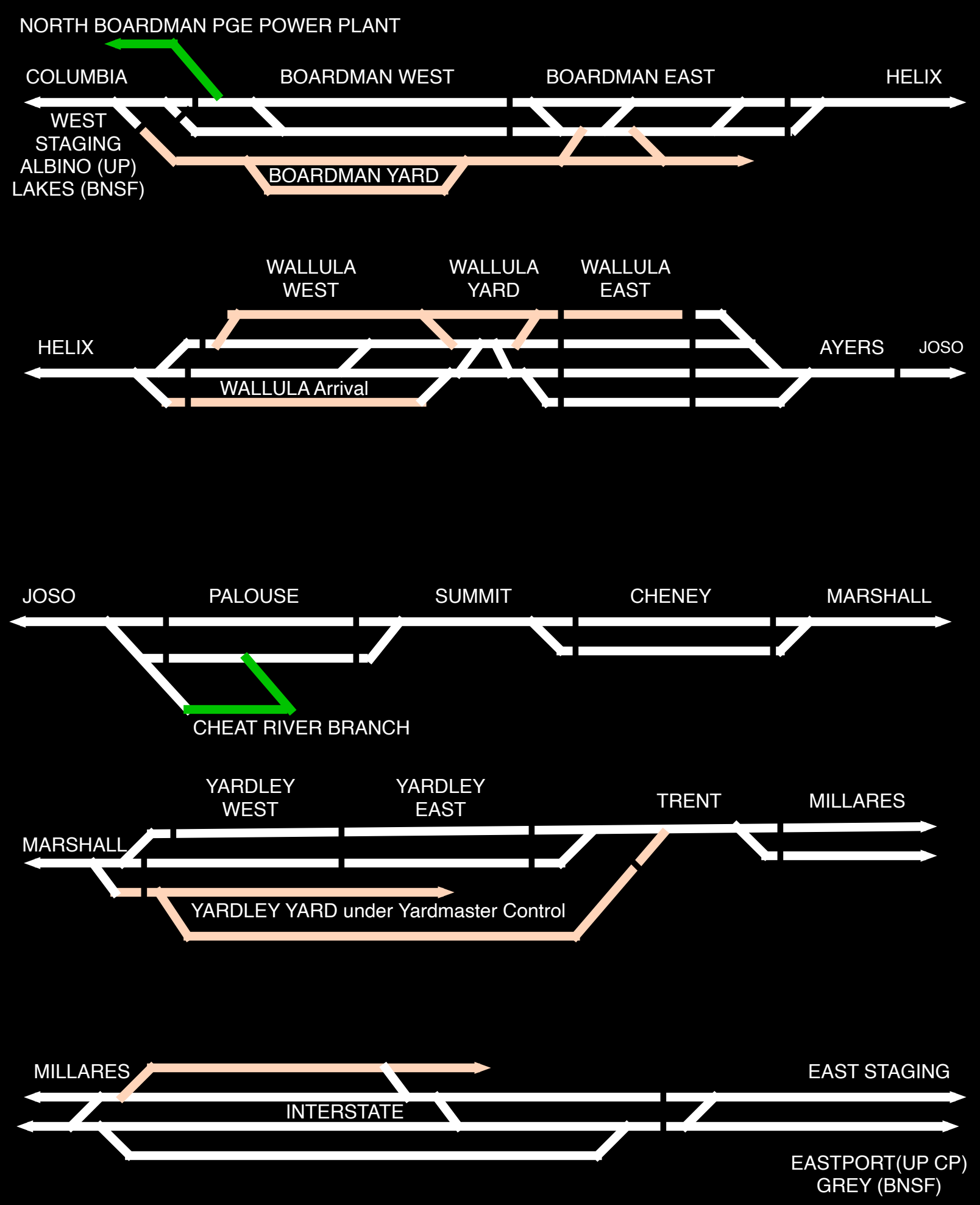
Image 21. Tim Rollason has Successfully brought the unit coal train to a halt at PGE Power plant loop (On Rogers run branch). Crews in the background are switching Boardman and Wallula.

Image 22. Trevor and Jeff are classifying cars in Yardley yard whilst a local train headed up by an ACe is departing for Millward.

Image 23. Trevor and Jeff are on the main at Wallula whilst the BNSF and UP are busy switching Wallula Yard.

Image 24 and 25. Switching Boardman and Wallula.

Image 26. UP Potash crossing Dry Reach Creek.



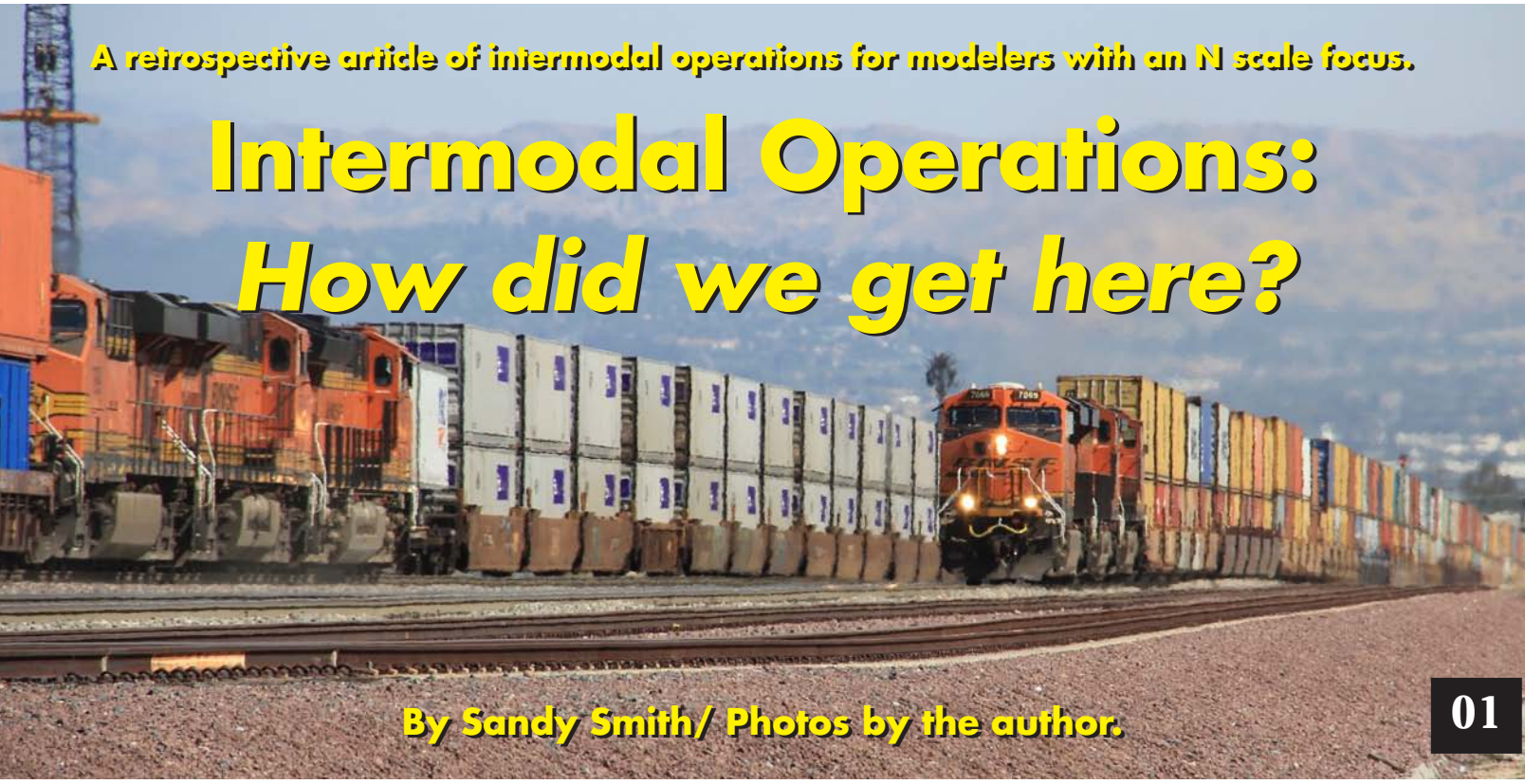
Duncan Cabassi's UP BNSF Joint Division
October 31, 2020 (Not to Scale)

Image 28. Trevor and Jeff are on the main at Wallula whilst the BNSF and UP are busy switching Wallula Yard.

Image 29. I live in Brisbane, Australia. We are at the lower end of the Tropics here so temperature variables are not great and rarely drop below 50f and rise above 99f. I can operate the layout all year round but I do have to monitor the local weather during the storm season. Last thing I want is the layout connecting sections across the 2 buildings exposed to rain. ◗

A retrospective article of intermodal operations for modelers with an N scale focus.

Intermodal Operations: How did we get here?



By Sandy Smith/ Photos by the author.

01

Image 01. A BNSF mainline west of San Bernadino CA April 28, 20

Often I find my working memory of things in the past corrupted by more current experiences and visual images. Such is the case with intermodal railroad operations. The endless lines of double stack container trains being the predominant train type these days, unless you are rail fanning in coal country. These massive and never ending trains of seemingly look alike trains I admit, I find a bit boring. I do enjoy a good mixed freight.

A bit of history:

Intermodal railroad traffic has been going on since the 1920's, (100 years, what?) back before most of us were born. The Pennsylvania had a prototype, using railroad built 19 foot long vans that look remarkably like a modern 20 foot container box. So why didn't this take off back then?

Three reasons; Regulation, Innovation, and Standardization. All three of these changed simultaneously and advanced on different schedules but have produced the rail traffic we see today when we are rail fanning or just waiting at a grade crossing or looking to model and practical industry for our layouts.

Until the 1980 Staggers Rail Act of 1980, railroads were severely limited and regulated in pricing freedom for freight services. Any and all changes or special rates had to be brought before the Interstate Commerce Commission on a case by case basis. These regulations applied to all freight, intermodal to grain, any kind freight you can imagine or combination of cars had to be signed off by the I.C.C. Once the railroads began to understand their newfound latitude in the early 1980's with regard to pricing of freight, the race really began to capture intermodal traffic.

Early on such innovation as standardized trailers or containers (for example, New York Central's Flexivan) were often limited by the regulations that kept the vans or railroad trailers from populating other lines traffic. The result was these efforts would start but the resulting restrictions on where they could go and who would handle them ultimately doomed their success. Not only were the rules of commerce in the way but, the railroads themselves held up very high standards toward truck trailers. You can find photos of 1950's and 1960's truck trailers lashed to flatcars with chains and binders, at multiple points sufficient to lift the entire car by lifting just the trailer. Once the railroads mentally and collectively agreed to employ the automatic jacks to support the end of the trailer things began to sort themselves out a bit. These jacks or hitches replace the support generated by the fifth wheel or the trailers' own landing gear. Sounds simple but back in the day this was beyond a common wisdom.

The final piece was a bit easier to get in place as the regulation by the Department of Transportation (U.S.D.O.T.) had for years and still does regulate vehicle sizing. The ubiquitous 40 foot van trailer dominated the highways of the 1960's until the 45 foot trailers were legalized in 1981. Since then we have bumped up to 48 feet and again to 53 feet in length. This regulation applies only to domestic (North America) trailers and containers. The import and export market is different as it is regulated by the IMO (International Maritime Organization) which dictated that ocean going boxes would be 20 feet long. The standards were finalized in 1970. Two years later the IMO allowed the 40 feet long boxes. Still to this day container ships are rated by their ability to carry TEU's or twenty foot long equivalent units even though the majority are now being used are the 40 foot long units.

Along with a standardized size came the IBC, inter-box-connector. A relatively simply hunk of metal designed to fit into the corner mounts between the boxes. Certainly some fail but the vast majority hang in there despite whatever the ocean or railroads can throw at them.

Along the way the U.S. Postal service dropped the railroad contracts for carrying of mail on express and passenger trains in 1967. Trading of railways for jet contrails was the first step

Image 02. FedEx trailers on spine car climbing the BNSF mainline on Cajon Pass, CA. March 14, 2012

toward the formation of Amtrak in 1971. This change by the USPS struck a minor nerve of pride landing in some railroad boardrooms and marketing departments. At the Santa Fe, led by John S. Reed, they envisioned a dedicated high speed, (sub 40 hours running time), guaranteed and scheduled TOFC (trailer on flat car) service to run daily between Chicago and Los Angeles called the Super C.

Ultimately the Super C didn't overhaul the intermodal world in the eight years it ran but it was a way forward that blossomed the expedited service all the railroads would embrace in later years. Ironically the best customer for the Super C was the USPS and the contract was eventually underbid by a UP/CNW bid that added 10 hours to the trip but cost less.

Kalmbach Books has an excellent book available by Mr. Jeff Wilson, Piggyback and Container Traffic with in depth technical discussion and highly detailed synopsis of the advance of intermodal transportation.

In building my current layout one of the things I wanted was a reasonable TOFC/COFC (trailer on flatcar and container on flatcar) facility that would be of moderate size. I say that as I am, a child stuck in the 1970's and the modern intermodal hubs are just so massive in size and scope I don't know how I could ever model one. I wanted a period specific article set in the 1970/80's and not about current, modern facilities and or equipment. So, if you are running some of those magnificent Kato, Atlas, or Micro Trains well cars and double stack cars with those slick operating magnetic containers on them this probably isn't your favorite article, but hang in there, just like Christmas it is coming. I feel that you can always learn something about the current state of things by reviewing the past for whatever period you are modeling.

The prototype world has given us substantial sounding terminology like, joint bars, interlocking tower, draft gear, prime mover, iron horse and the like. So when the term piggyback comes to mind it doesn't sound very railroad-esque. Many railroad terms are in themselves adjectives and adverbs for other things in this world.

As I mentioned earlier the railroads were just getting to grasp the freedom they had vested to them by the Staggers Act in 1980. Unit trains were becoming the norm and the TOFC business was an all hands on deck, all guns to bear. During my brief time at the Burlington Northern, they invested heavily into their Innovative Intermodal Service where marketing envisioned upgrading ramps all over the system into intermodal hubs of traffic. Old ramps were spruced up, the circus ramp style of loading was still being used by most railroads and piggy packers arrived in places you wouldn't have expected.

The railroads had used any old siding, usually in a yard facility, as a means to get a truck trailer on a flat car. There were simple dirt ramps with some wood planks laid crosswise to more specialized circus style ramps. Some roads used an old flat car as ramps to the extent of removing one set of wheels and the couple from that end, burying that end and leaving the wheels/truck assembly on the other complete with the coupler still attached, adding only a bridge plate bolted or welded to the end of the car. This would mate to the flat car's attached ramp. So that flat car you bought at the model railroad show that doesn't quite meet your current detail standards can be used quite easily as a car ramp. Try to use one of your home road as they were rarely a foreign road's discarded equipment (for example don't use a Pennsylvania Railroad car at a New York Central ramp, the demurrage would be a killer).

While most yards already had ramps made of earth with some

Image 03. A K Line ship in San Francisco Bay on February 23, 2015

Image 04. M/V American Presidents Line *Egypt* on February 24, 2015.

Image 05. A shot of Hyundai boxes on the BNSF mainline on the super elevated curve near Holbrook, New Mexico March 12, 2012

sort of top surface, wood, concrete, asphalt or crushed and compacted stone they were not especially handy for backing truck trailers up their slopes. Initially built to be able to unload heavy equipment, excavators, bulldozers, etc. and they didn't stand up to loading many trailers, day after day or make it easy to back a trailer up the ramp. Enter the circus style ramp where you had several cars coupled, on a siding and the trailers were backed on one at a time on to the cars and then the truck tractor would drop the trailer and drive off to fetch another. Why are they called "circus style" ramps? Typically when the circus came to town this is exactly how they had to unload their wagons of equipment, although they never seemed to be short of personnel to get the job done. When you factor in snow and ice on a circus ramp, this became a more difficult situation for the drivers as they had short wheel base tractors and longer trailers to maneuver. Then once you were up the ramp and on to the car, you got to have fun backing your trailer down the length of the cars, sometimes as many as six cars coupled, with the resulting bumps and grinds of connecting plates and less than cooperative (misaligned trailer wheels) the entire length of the cut of cars, maybe 500 feet if you were placing the first car. Not fun to do and slow. Guides were usually placed along the sides of the ramp where as the flat cars themselves had integral guides in the form of the side sills.

In the 70's and 80's the piggy packers and overhead bridge cranes came on the scene to alleviate these problems in loading. Further they could pluck out an especially time critical trailer without having to unload the line of trailers in front as would have to be done at a circus ramp. Also the blocking of the train could be more easily achieved as the loading yard didn't have to wait to have all the trailers to begin sequence loading the train and you could have as many cars in one cut as you wanted.

So all of this organization was fine until a twenty-foot long container arrived on a flat bed truck and had to get loaded on to a flat car. Large forklifts were employed to lift the boxes on to the cars. Usually the multi purpose flatcars had guides that could be turned up and locked in place rather than the crude method of running chains and binders up over the top of the box.

As a point of reference, oceangoing containers are classed by classification societies such as the American Bureau of Shipping (ABS), Det Norske Veritas, Lloyds of London and the like. These containers are designed and certified to handle structural loads, which permit stacking ten high onboard ships as well as lateral loads that would squash and twist domestic boxes. As is the case you are only going as high as the weakest box in the stack will permit.

The railroads tried to match the demand and anticipate where it was going. In the 70's and 80's most of the cars being loaded were the 89 foot long flat cars (up to two 45 foot cats) although there were many single cars that were repurposed box cars and old flat cars still earning a living for their owners. Thousands of truck trailers were reinforced for handling by the cranes and packers as their initial designers never thought that they would be hoisted by the top and bottom side rails.

These converted cars were cheap since they were cast offs but

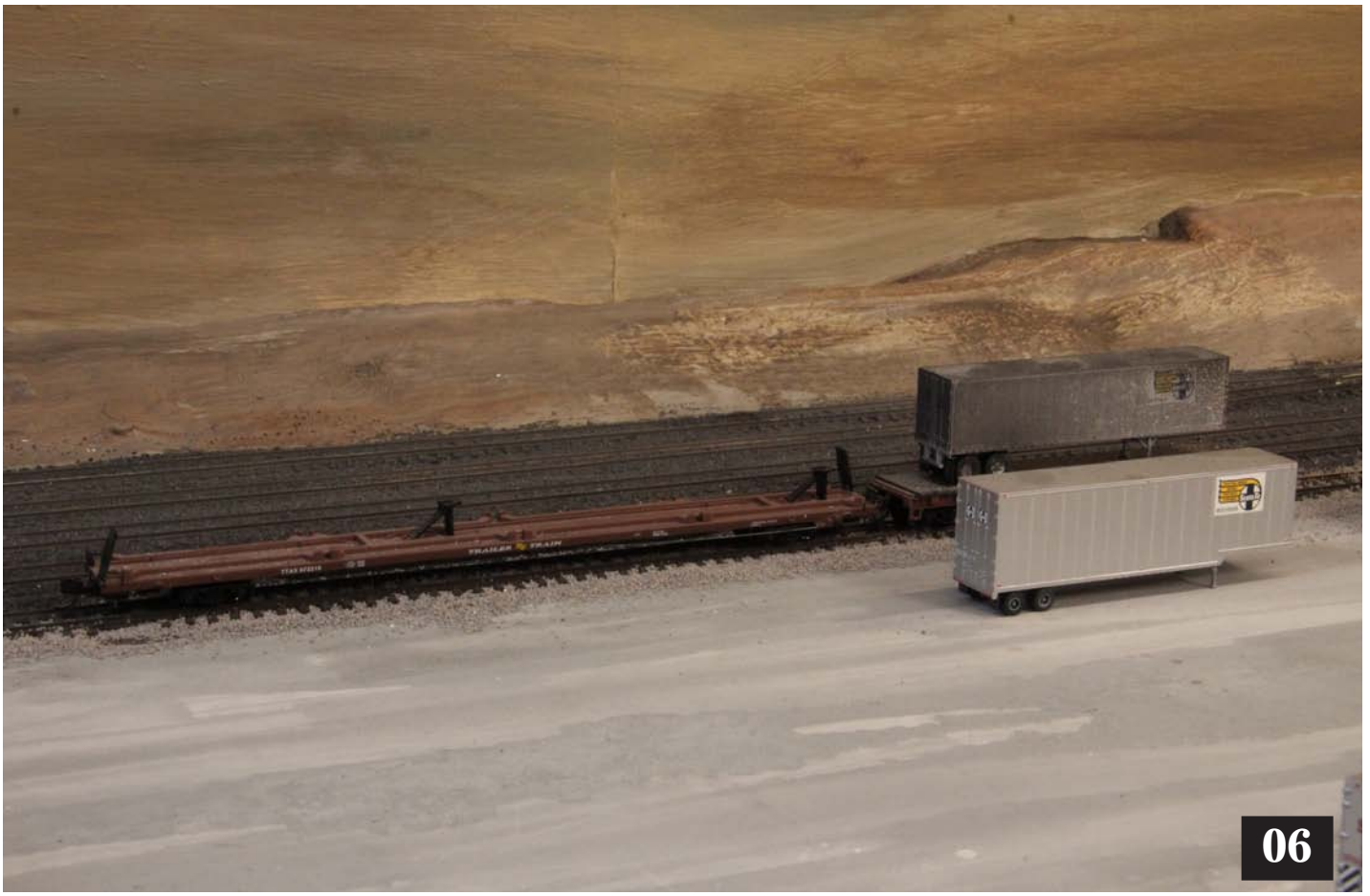


Image 06. MicroTrains Line Trailer on Flat Cars (TOFC).

Images 07 A model of a TOFC ramp made from a flat car.

Image 08. Wheels of Time model of a piggy packer. Let's hope this model is re-producedas it is a wonderful example of a prototype and according to on line auctions, highly valued as well.

Image 09. A Kato container handler just imported from Japan.

Image 10. One of the cool things about modeling the early intermodal era is the wide variety of equipment that can be used.

still heavy. A steel deck, multi purpose flat is also relatively heavy when you consider the cargo of 45,000 pounds of truck trailer and it's cargo. With the advent of more cranes and packers the railroads moved away from the solid deck cars. On came development of the Santa Fe's Fuel Foiler, spine and skeleton cars and others. Southern Pacific began development of the stack car in 1977. In the period we are talking about you could have quite a variety of containers, domestic and ocean, truck trailers from 28, 40, 45 and 48 feet long, 89 foot long flats with 50 foot long converted box cars with spine cars all mixed in the same train. On top of this was the addition of the new articulated cars. These were cars that shared a truck set between the two.

The last big development In addition to this came the road railer, a truck trailer with rail wheels permanently attached at the rear near the highway wheels. These allowed for an even greater reduction in empty weight and required very little equipment to turn into a train. On a personal note, as a young transportation department, management trainee I was dispatched to ride the lead locomotive of one of the first road railer consists on the BN. It was an ice and snow Saturday morning in Fargo. On the way to Dilworth, MN, where the crew change was, I got rear ended by a Corvette on the way. After filling out the paperwork I had to make a mad dash to the west, to catch the train at a point, about 30 miles down the line where I could get aboard to fulfill my duties to chaperone the train. Good news, I was treated to just how fast a train could accelerate with just 40 trailers behind a single SD-40-2 locomotive. Bad news, in my haste to get aboard I left my camera in the car, hence no pictures for this article. Worse news, my escapade of catching the train in Castleton, North Dakota was noted on the delay report at the Monday morning meeting with the Assistant Superintendent. Sorry Roger (Ass't Supt. Dakota Division) One cool thing that frosty morning (pun intended) was the expression on the truck drivers' faces as we passed through grade crossings and along parallel highways. Most took a double take at the sight of trailers on the rails.

If you are modeling the period of the 1970's to the 1980's you really can't go wrong with your equipment choices or facility modeling. Bare bones dirt ramps to bridge cranes, wood decked flat cars to articulated spine cars with maybe a short double stack can all work to one degree or another.

For the operations enthusiasts out there, enter the Chub (not a typo). Way back when at my last post on the BN, we had a dedicated UPS train designated CHB for Chicago to Billings. It left Chicago around midnight, 5 nights a week, on Friday through Tuesday. It passed through Mandan, North Dakota, only ever westbound and depending on delays between 10 P.M. and midnight on Sunday through Thursday nights in Mandan. It could have as many as fifty cars and I think one night it had eight. So for you operations enthusiasts you can have a non 7 day schedule with vastly alternating train length only running one way. I never did figure out where the cars went once they arrived in Billings, I just thought they put them in the hidden staging tracks under the mountains by the basement stairs like we all do…

I know there will be folks that can deride modelers for having such license on their layouts, spine cars next to old box flats but with the exception of the 53 foot long domestic boxes and some of the newer paint schemes, it all works. ◗

The Northern Pacific's Tacoma Division

The Auburn Yard Design So Far...

By Keith Lyons/ Photos by the author.

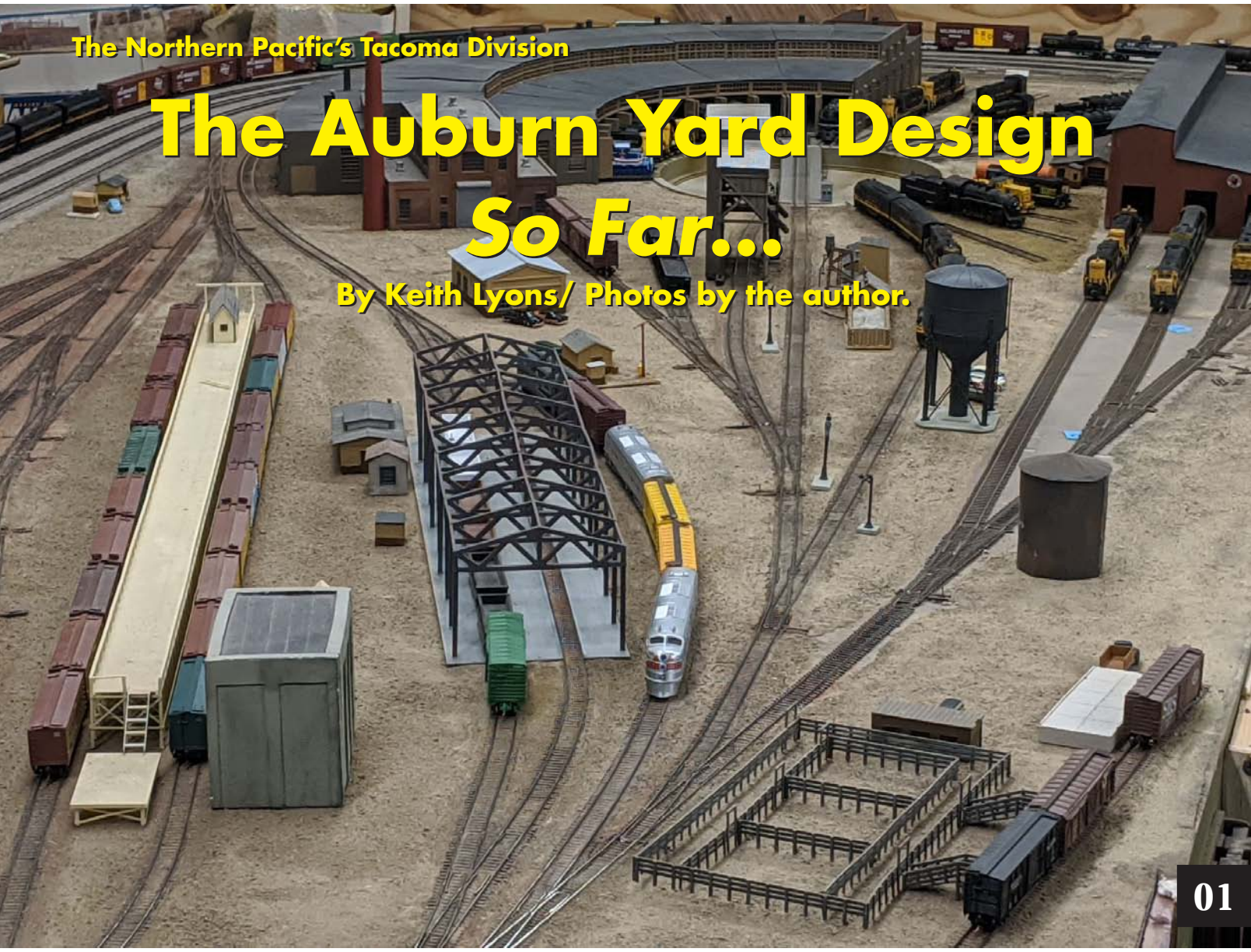


Image 01. The Auburn Yard is starting to come together. The open frame structure is a scratch built shed that will be covered with corrugated metal and may be the subject of a future article. The stock pens are a kit from Silver City models that may be replaced with an etched brass version. Most of the turnouts are modified MicroEngineering #6 code 55. There are also a few Atlas#7 code 55 as well. All turnouts are driven by servos with microswitches for powering the frogs.

Auburn, Washington was the location the Northern Pacific Railroad chose for a large yard that was basically half-way between Seattle and Tacoma, Washington. That same location was where the East-West Mainline connected to the North-South line. Freight trains from the East would generally terminate there. The cars would be broken up and sorted to go to their next destination. It was a major hub for the railroad. Several "Local" jobs were also made up at the Auburn yard.

On my Northern Pacific Tacoma Division layout I have taken railroad maps, drawings, and photographs of the Auburn area and used them as a basis for my representation of the area, modified for the space I have, to create a 300+ car yard (40' equivalent) . I was able to get pretty close to the look of the northern section of the yard throat while moving some other features around the yard to a usable area.

While the real Auburn Yard is double-ended I only had room to make a single ended yard. This creates additional challenges for yard operations but those are not insurmountable. In fact I chose to do it this way due to inspiration form fellow N scaler Roy Cutler and his Olympic Northern layout, and Brian Morgan on his BN Selkirk Division (original) layout. Specifically, Roy's former NTRAK modules yard became the operational heart of his layout and was made to work in an operational sense by our late friend Doug Walters. Their concept and strategy made for such an enjoyable experience that I figured I could make it work.

So far most of the layout work has been on the upper of two decks. Scenes from the east-west mainline can be seen in N Scale Railroading #097 Sep/Oct 2016 "Touring Northern Pacific's Stampede Pass Crossing". Most of the transcontinental line is a single track mountain railroad with a lot of passing sidings. Most of the lower deck is the line that runs from Renton, WA north along the east shore of Lake Washington to Sumas on the Canadian border. This is a single track railroad but will have a lot more industry and switching. Seattle staging is on the main lower level. Tacoma staging is located below the Auburn Yard. Operationally the Auburn Yard ties the Northern Pacific's freight operations together as it did the prototype.

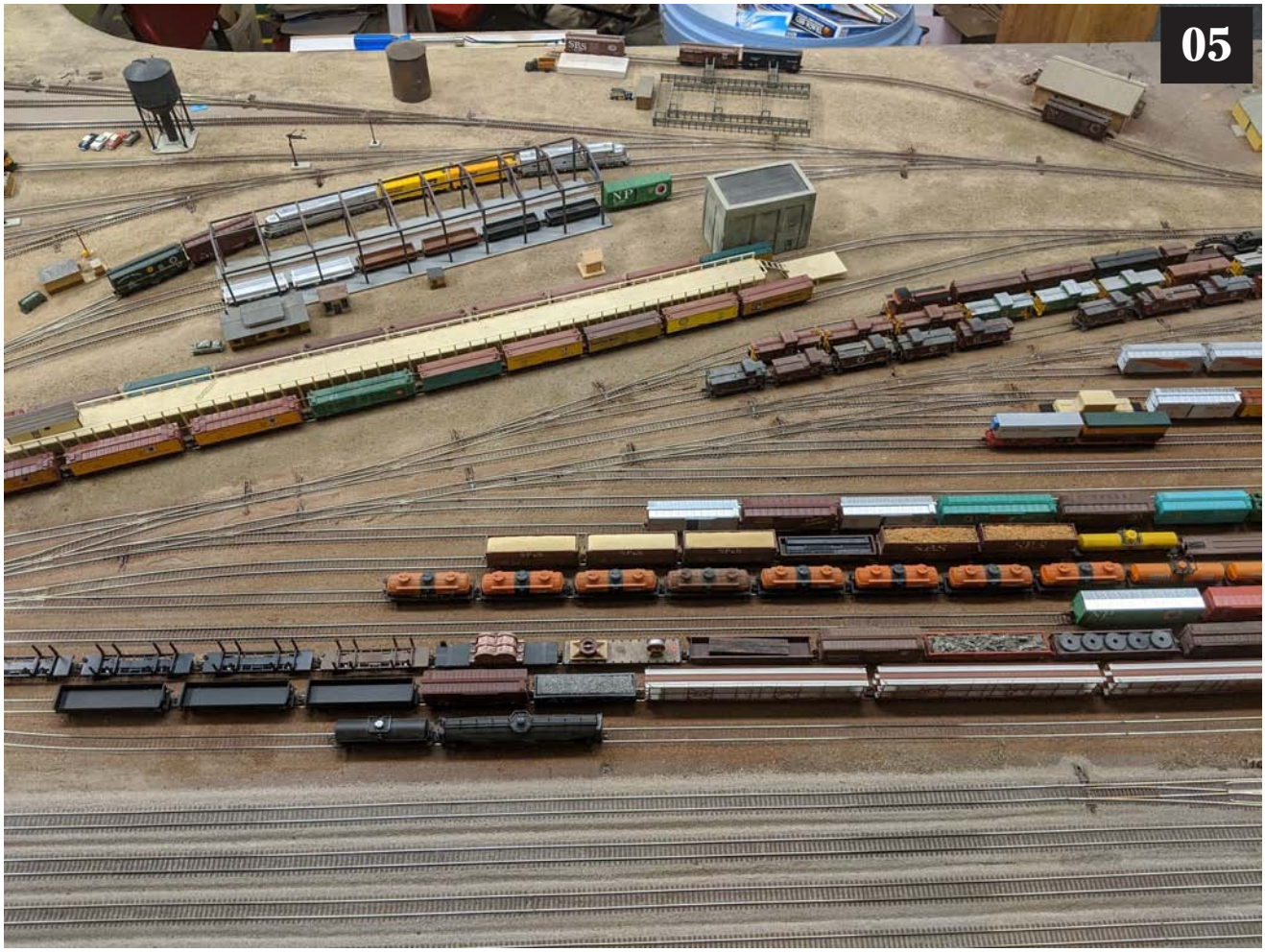
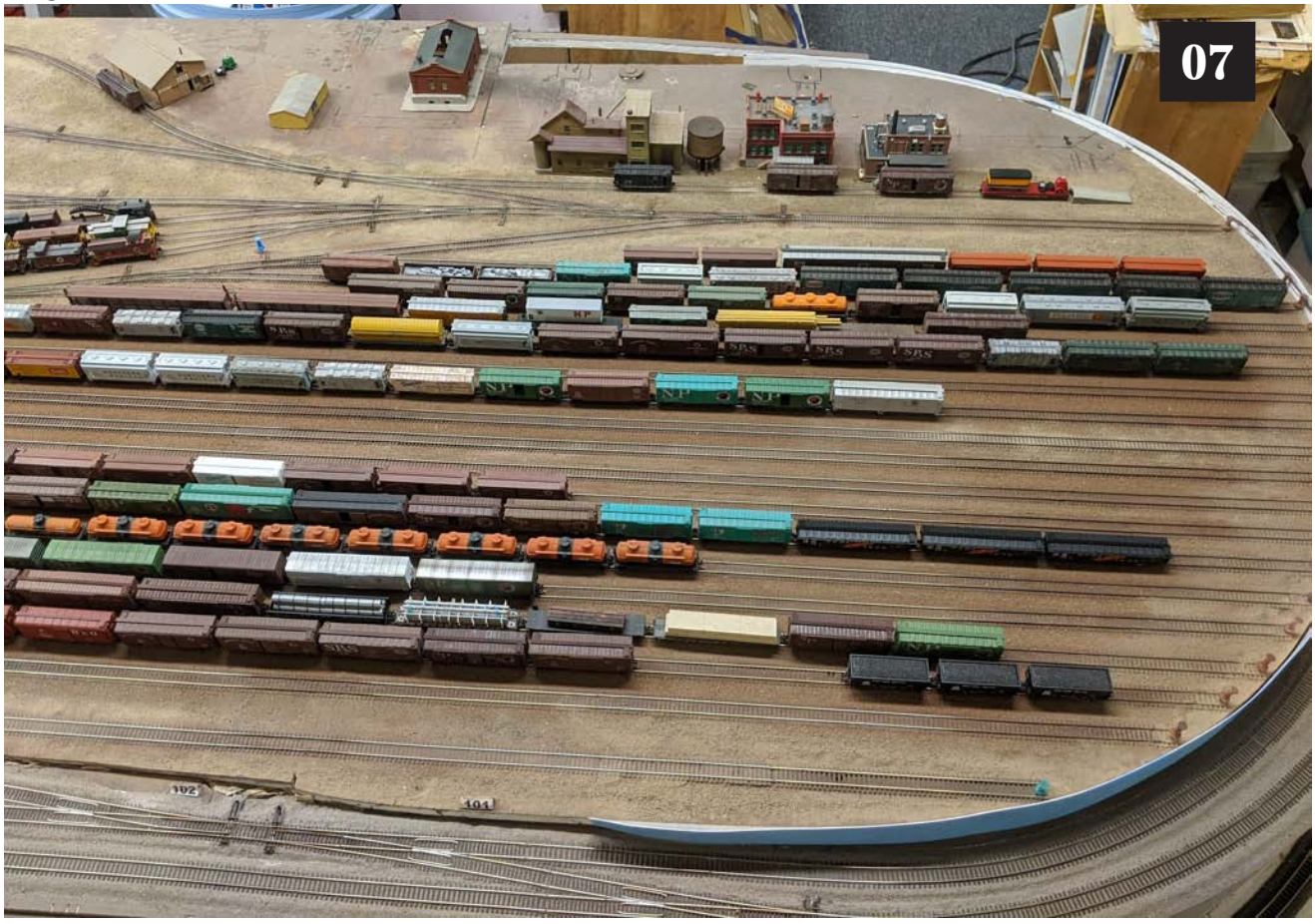


Image 05 and 06. The camera continues to move to the right we;re on the west side of the yard moving south.



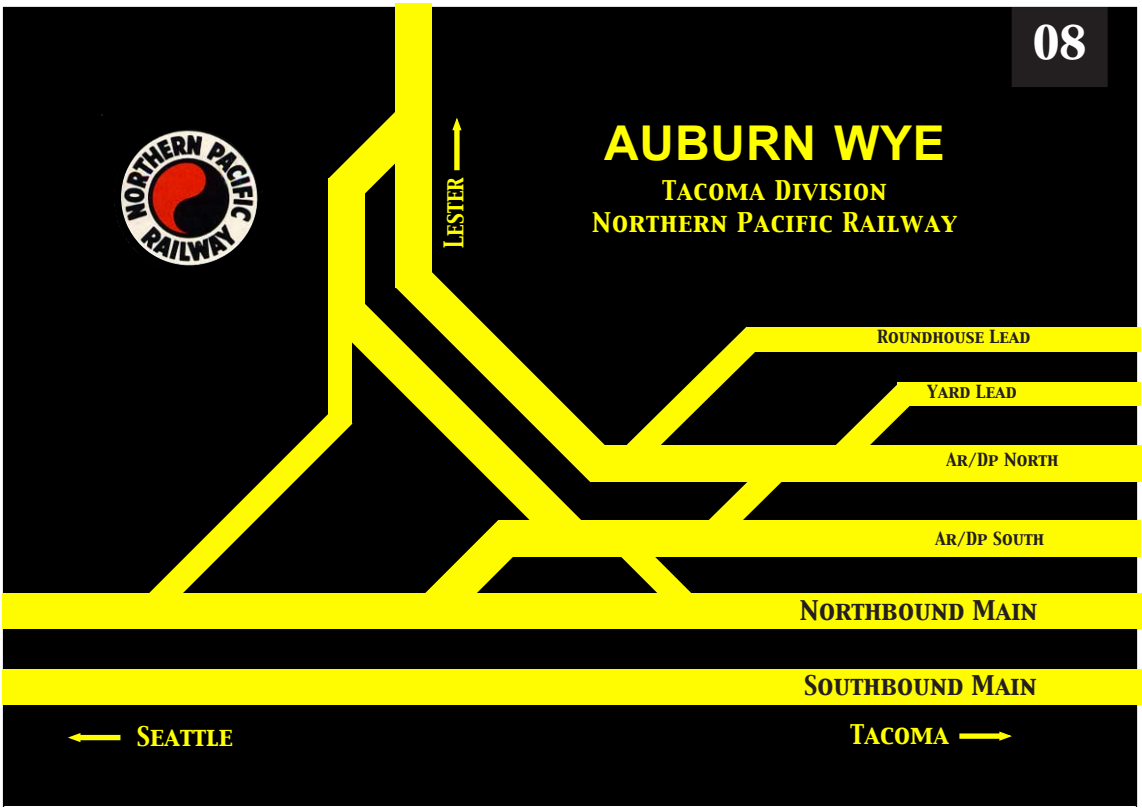
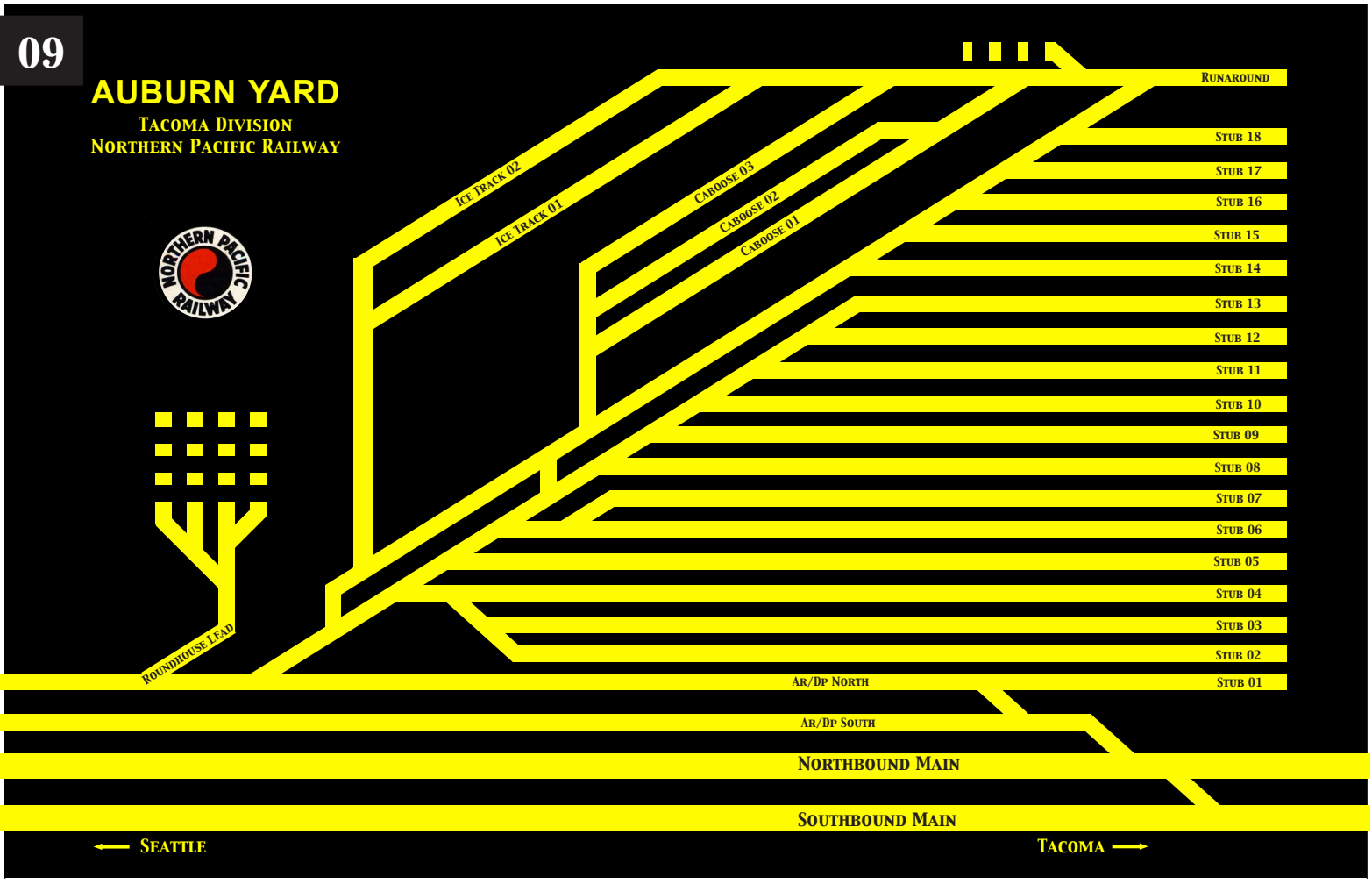


Image 08. Right is the Auburn wye panel "so far". Several panels have been in service and then easily replaced as changes have been made to the track and turnout controls

Image 09. Below is the main panel for the Auburn Yard. These panels are very diagrammatic but (hopefully!) help guest crews orientate themselves to the operations. The locomotive service panel will continue from the dotted line on the top of the Yard Panel.



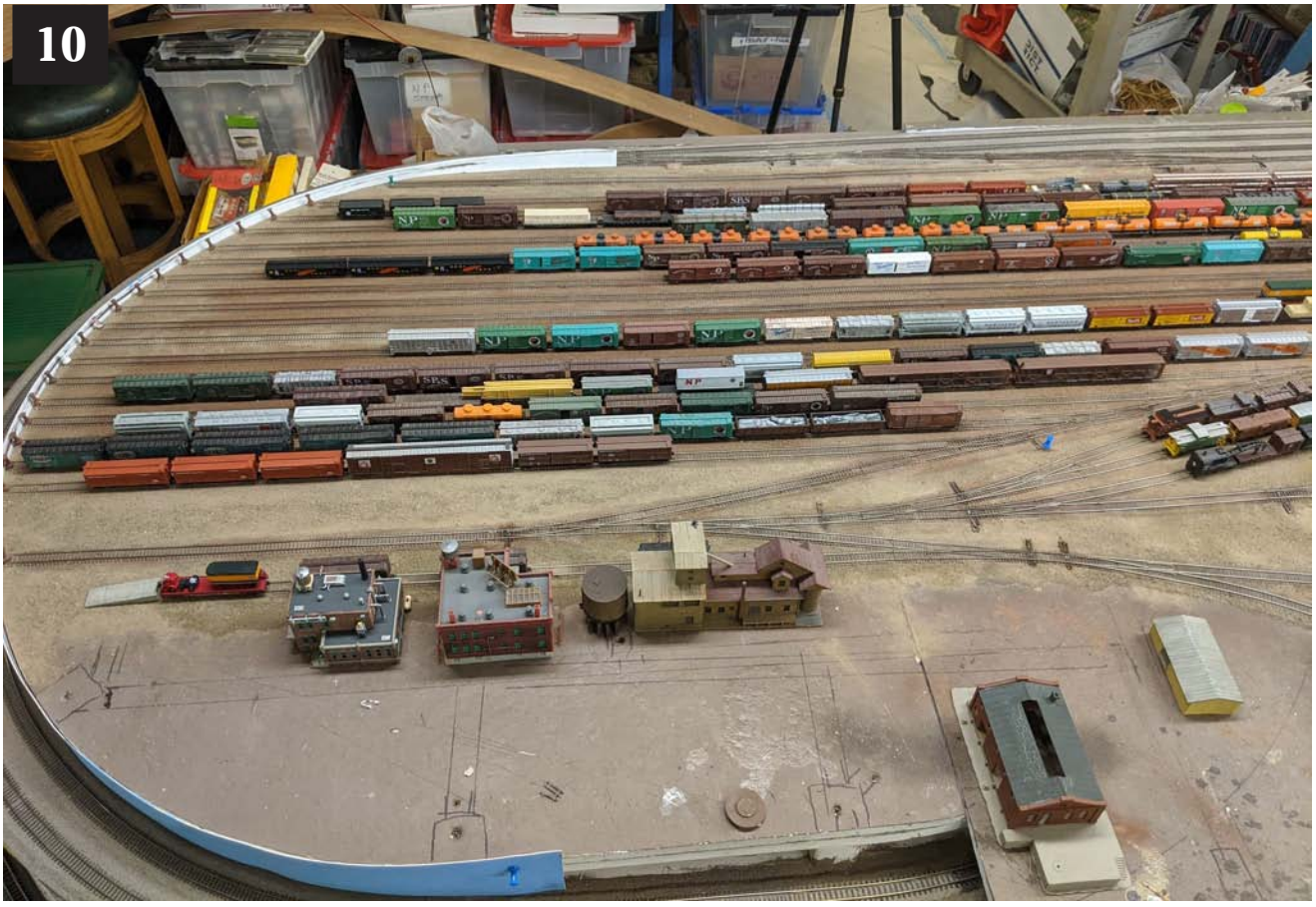


Image 10 and 11. The camera rounds the south end and moves north along the east side of Auburn Yard.

Passenger trains did not enter the Auburn yard. The Northern Pacific and Great Northern passenger trains between Seattle and Portland ran parallel along the west side of the Auburn Yard. The NP's transcontinental North Coast Limited and Mainstreeter came south from Seattle, took the north leg of the Auburn wye, and stopped to pick up and drop off passengers bussed to and from Tacoma.

As I am intending the layout to mostly be of the "transitional" period between steam and diesel I needed a turntable. I used the Walther's 130' turntable and matching roundhouse kits as the basis for my yard. Incidentally the building of the roundhouse kits and mounting of the turntable were featured in N Scale Railroading magazine #36 Jul/Aug 2006, and subsequently reprinted in the Walther's catalogs for a few years after the kits came out. I am using the diorama I had built for the article in the layout.

Alterations from the real drawings: I had to move the location of the Ice Dock into an area adjacent to the yard throat while reducing the number of RIP tracks and I am very happy with the compromise as well as how they operate. I added an additional caboose track originally as an error but it has aided in operation so I decided to keep it.

This yard will see several freight trains arriving from the Seattle and Tacoma area as well as from the east. It will also be the origin of at least 4 local trains, and the origin of the International train going to Sumas, Washington (at the Canada/US border). Great Northern trains will run by on the mainline between Seattle and Tacoma as they shared the mainline. I will also have occasional Milwaukee Road traffic all over the layout as their parallel line will have wash-outs or tunnel cave-ins causing re-routes over the NP line.

Image 12. The main aisles are 48", the stub aisle east of the yard is a little tighter.

You can see that the yard throat begins off of the mainline on a curve. The problems of having to push long drags of cars through a yard throat is intensified by being on a curve and I have found using lower profile wheels could make that worse. In fact I experience many issues with equipment that has the original MTL low-profile wheels but not as much with the current "medium" profile wheels. I am changing out all of the original low profile Delrin wheels. I am currently experimenting with MTL metal wheels but they still have a Delrin axle. I have found that certain low profile metal wheelsets work very well. I am using Fox Valley wheels, ExactRail wheels, and Athearn wheels with varying success and they are getting hard to find. Eastern Seaboard Models has 33" wheels and every car that has gotten ESM wheels works extremely well plus they are available!

The layout uses DCC but I still have local panels for throwing turnouts, inform operators of the track layout, and ease of tracking wiring. The Auburn yard has a separate panel for the wye and another for the yard itself. There will be a third panel for the locomotive service area. The yard is 48" wide and, an advantage of a stub yard, can be operated with operators on both the east and west sides of the yard.

I have been collecting pre-built structures for years as I attend model railroad swap meets. I am using several of those in these photos intended as place-holders. I have even roughly painted many of them into a rendition of the paint style the NP used and I am really liking the results. I may end up using many of these buildings and give them a better paint job but for now I will just keep building the rest of the layout. ◗

TRAVEL GUIDE N EVENTS

2021 FEB 27-28 WA Monroe The Annual UNW Show will skip a year. See you in 2022.

2021 MAY 15-16 OH Hilliard/ Columbus area. 12th Annual Ohio N-scale Weekend at the Franklin County Fairgrounds, 4100 Columbia St., Hilliard, OH http://www.centralohiontrak.org/

2021 JUN 22/23-27 NV Sparks/ Reno area. 28th Annual National N Scale Convention hosted by the N Scale Enthusiast. The main venue is the Nugget Hotel that has free parking. An early bird visit to the Western Pacific Railroad Museum in Portola is planned for June 22. The plan for the convention includes layout tours, Convention Banquet, Welcome Reception, Manufacturer's Breakfast, Live Auction, Swap Meet, and more!

2022 JUN ??-?? TN Nashville. 29th Annual National N Scale Convention ◗

N HORIZONS

Bluford Shops The cornfields are back! Arriving in early November, new supplies of cornfield sets in both Summer Green and Autumn Harvest. Also arriving are new ICC Bay Window Cabooses in: Norfolk Southern, Erie, Central Of Georgia, Southern transition era, Chcago & North Western red, Norfolk & Western, Southern Pacific, Cotton Belt, Duluth Missabe & Iron Range, Milwaukee Road, Baltimore & Ohio blue and Missouri Pacific. ◗

OBSERVATIONS

Thoughts by Kirk Reddie

One of the fun things about editing *NSR* is catching up with folks. Nobody likes the zombie apocalypse but those of us who enjoy this hobby are in far better emotional shape than most.

I met Duncan Cabassi many years ago when he visited the area. Several locals have visited him and enjoyed operating on his layout. His Joso trestle is very clever way to expand the layout.

I got to catch up with Sandy Smith and hear his stories about the early days of intermodal in his early days.

I miss Keith Lyons' work socials. I was amazed at how much progress he has made since March. I suspect we may have been slowing him down all these years.

Have you checked in with your train pals? Make a weakness a strength. Make good things happen! ◗

SEE YOU NEXT ISSUE!

More good stuff! Maybe more structures by Keith Schaber! ◗