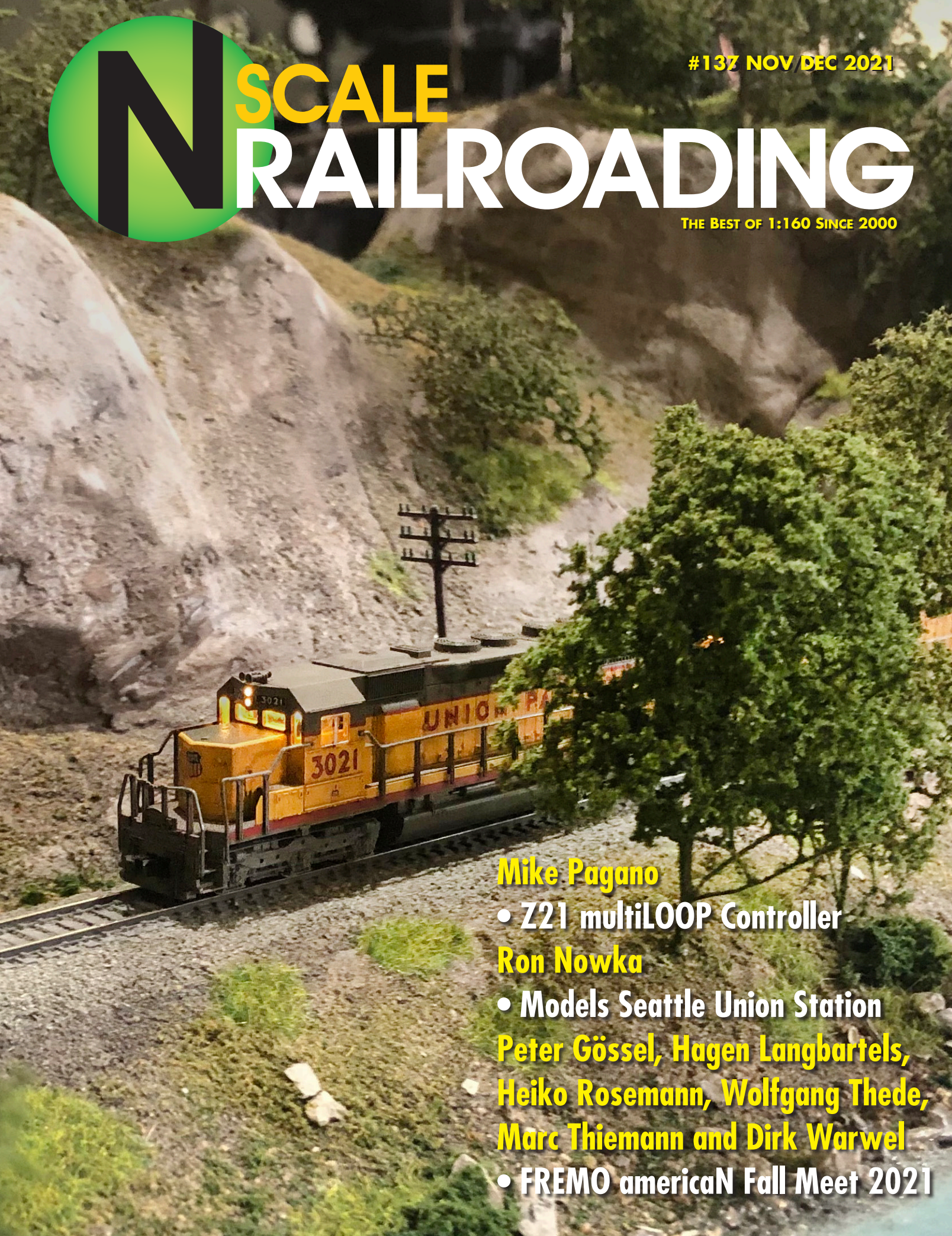
#137 NOV DEC 2021

N SCALE RAILROADING

THE BEST OF 1:160 SINCE 2000



Mike Pagano
• Z21 multiLOOP Controller
Ron Nowka
• Models Seattle Union Station
Peter Gössel, Hagen Langbartels, Heiko Rosemann, Wolfgang Thede, Marc Thiemann and Dirk Warwel
• FREMO americaN Fall Meet 2021

N SCALE RAILROADING
WELCOME!

This issue's cover features Union Pacific 3021 alongside the Payette River in a scene from the FREMO americaN layout. Most years members assemble a layout somewhere 'ion the continent' and spend the weekend operating with all dispatching North American trains in English.

CALCULUS CLUBS
HELP N GO TO
∞
AND SEE WHAT HAPPENS!

GREAT BEACH! START YOUR SURFING HERE!

AD INDEX

Welcome to ***N Scale Railroading*** #137, the November December, 2021 issue.

Page 04. **New Products.**

Page 14. **Mike Pagano** shares part 4 of his write up of the new Roco/ Fleischmann Z21 DCC system. This part covers their auto-reverse system.

Page 16. Large passenger terminals can help define an area even after the rails are pulled up. My third version of Seattle Union Station is an ~accurate block of wood. Several of us discussed how to make an actual model. **Ron Nowka** came up with the concept of decopaging resized photographs onto a wood frame. The resolution up close is rough but at arms length the model looks great with faux 3D parts and scale bricks. Details will be added but Ron's method saved time and money.

Page XX. One of our most popular recent features is the **FREMO americaN** layout featured in #127. They are back!

Page 45. **NCalendar** and **NHorizons.** ◗

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N SCALE RAILROADING
NEW PRODUCTS

Canadian National FP9A 6538 in the 1954 scheme is Rapido 530504. Not as much as the CP model, but a lot of extra roof detail on this model.

CP Rail FP9A 1412 is Rapido 530530. Now this is an F unit with an incredible amount of details that Canadian units had on their roofs, grab irons everywhere, etc. Like all Rapido rolling stock, these are well packaged in plastic boxes with cardboard sleeves.

Southern Pacific S-2 1771 is Atlas 40 004 403. These are great looking models and seem a lot heavier than expected.

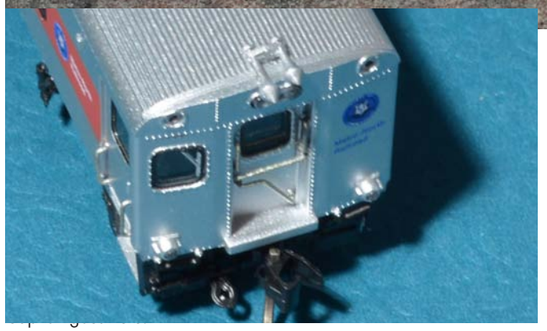
Erie S-2 513 is Atlas 40 004 694. The thin hand rails are amazing.

64' Trinity Reefer Tropicana/ TPIX 3041 is Atlas 50 004 497. The brake end (left) is nice but the A end (right) has a nicely detailed porch. See your dealer!

Amtrak Horizon Coach 54054 in Phase 3 “Wide” is Rapido 528007.

Amtrak Horizon Dinette 53501 in Phase 3 “Wide” is Rapido 528024.

Connecticut DOT Comet coach is Rapido 528036.



Connecticut DOT Comet cab/coach is Rapido 528037. On the left is a shot of the cab end of this car. This enables the trains to be run in reverse.

The Comet commuter cars came first. Rapido offers Comet cars in coach and cab cars in AMT Montreal, CDOT, MBTA, MNCR, NJT, SEPTA, and Undecorated. The modeler can add reporting numbers.
The Amtrak Horizon cars (aka Amfleet II cars) were based on the Comet cars. Note that the Amtrak cars have more conventional looking trucks. Rapido offers these in Phase III narrow, Phase III wide, Phase IV, Phase VI with a surprising quantity of SKUs (31!), plus Amtrak California (in 3 Dinettes) as well as Undecorated. This is an ambitious offering and those waiting for these cars should be very happy to have such a variety offered straight out of the gate.

CSX 141577 is Atlas 50 005 581.

Astoria Plywood Corporation/ USLX 10054 is Atlas 50 005 209.

Rath's Black Hawk Bacon/ RPRX 472 is Atlas 50 005 486. Mmm. Bacon.

The Oil Storage Tank (above) is Walthers 933-3893. Looks like a foreground model to me.

REVIEWING Z21 MULTILOOP CONTROLLER

FLEISCHMANN

PART 4

by Mike Pagano/ Images by Author

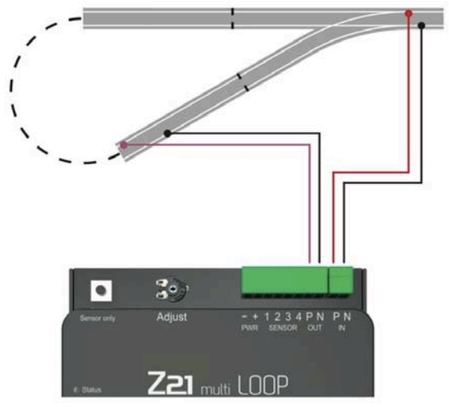
Welcome back to the Z21 series. If you are looking to switch to a DCC system that offers an easy set-up to operate your trains with a Wi-Fi System, then look no further. In the April 2020 issue of NSR, we walked through the Fleischmann/ Roco DCC z-21 Start command station with the Wi-Fi smart device control. This system is expandable and Roco supplies a number of accessories to work with their system. One of the advantages in any DCC system is the ability to provide polarity correction to reversing loops and wyes automatically. While some boosters can function as an auto-reversing appliance, it might not be beneficial to add boosters to just handle polarity corrections. Let's take a look at other options that Roco has to offer.

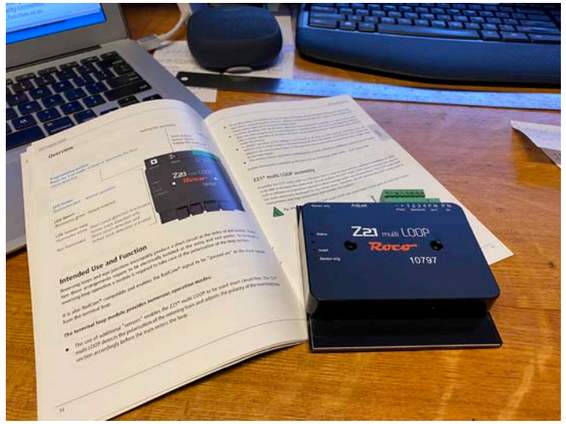
Z21 multiLOOP for DCC

The Z21 multi LOOP #10797 is a compact device that measures at 4" x 4" and is easily mounted under the benchwork close to where a reversing section of track is located on a layout. There is a separate two-pin plug that needs to be connected to the DCC input power coming from the track power bus. Two pins of the 8-pin plug are connected to the isolated reversing section of track on the layout. There are other connections marked as sensor and power-in that are needed for an analog (DC) setup. We'll touch base on this later. The module can also provide short circuit protection or not depending if this feature is activated from holding down the "sensor only" button for three seconds. The module has a manual adjustment for sensitivity to adjust the reaction between polarity correction and short circuit protection. No external power is needed when the module functions with a DCC system. See figure on lower left of this page. Keep in mind that when a train is entering the isolated revering section, any wheels that are conducting for power or lights cannot enter and leave the reversing section simultaneously. In this case I made sure my reversing section is longer than the longest passenger train. In a wye track (triangular) configuration, one leg should be longer than a locomotive consist.

multiLOOP for DC

Using the multiLOOP module for an analog (DC) layout is possible with some additional wiring. This is accomplished with insulated sensor track sections. Roco recommends each isolated sensor track section be no longer that one-inch in order to prevent a short base locomotive from stalling.
When using the multiLOOP in a analog mode, the short circuit detection must be turned off.
For more information on Roco's products, visit: www.z21.eu/en/products ◗





MODELING WITH PHOTOS:

RON NOWKA'S SEATTLE UNION STATION

by Ron Nowka/ Images By Author and Kirk Reddie

01A

Seattle Union Station was built during 1910-11 by the Oregon Washington Railroad and Navigation Company (Union Pacific). The station was built east of Fourth Avenue South and served the Harriman controlled Union Pacific. King Street Station served the Great Northern and Northern Pacific (both Hill roads) was located directly west across Fourth Avenue South. Rumor was that the Harriman forces were going to tunnel under Seattle and build to Canada including a line west of the Great Northern's Puget Sound hugging tracks. About the time the stations were built the Hill and Harriman interests calmed down. Union Pacific got traffic rights over the Northern Pacific's mainline between Portland and Tacoma and the UP gave up their plans to build to Canada.

The Milwaukee Road became a tenant of Seattle Union Station. The track to the station wasn't electrified until 1927. The Coast Division's mainline was electrified between Othello west to Seattle and Tacoma. The historical location is at the south edge of Seattle's First Hill and the Duwamish River tide flats area which was filled from material from the Denny Regrade and the Dearborne Street cut a few blocks to the east.

01B

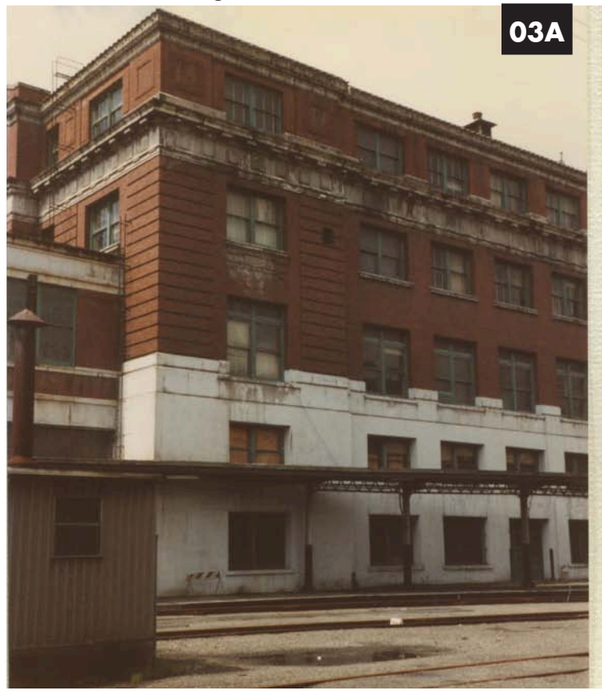
01C

01D

Above. Seattle Union Station from different angles. The building north of the station is the New Richmond Hotel.

02

Above. Kirk took a photo safari of Seatte Union Station during the spring of 1984. King Street Station is to the west (right) across Fourth Avenue. The Kingdome can be seen in the distance. The track in the foreground was a run around track.



03A

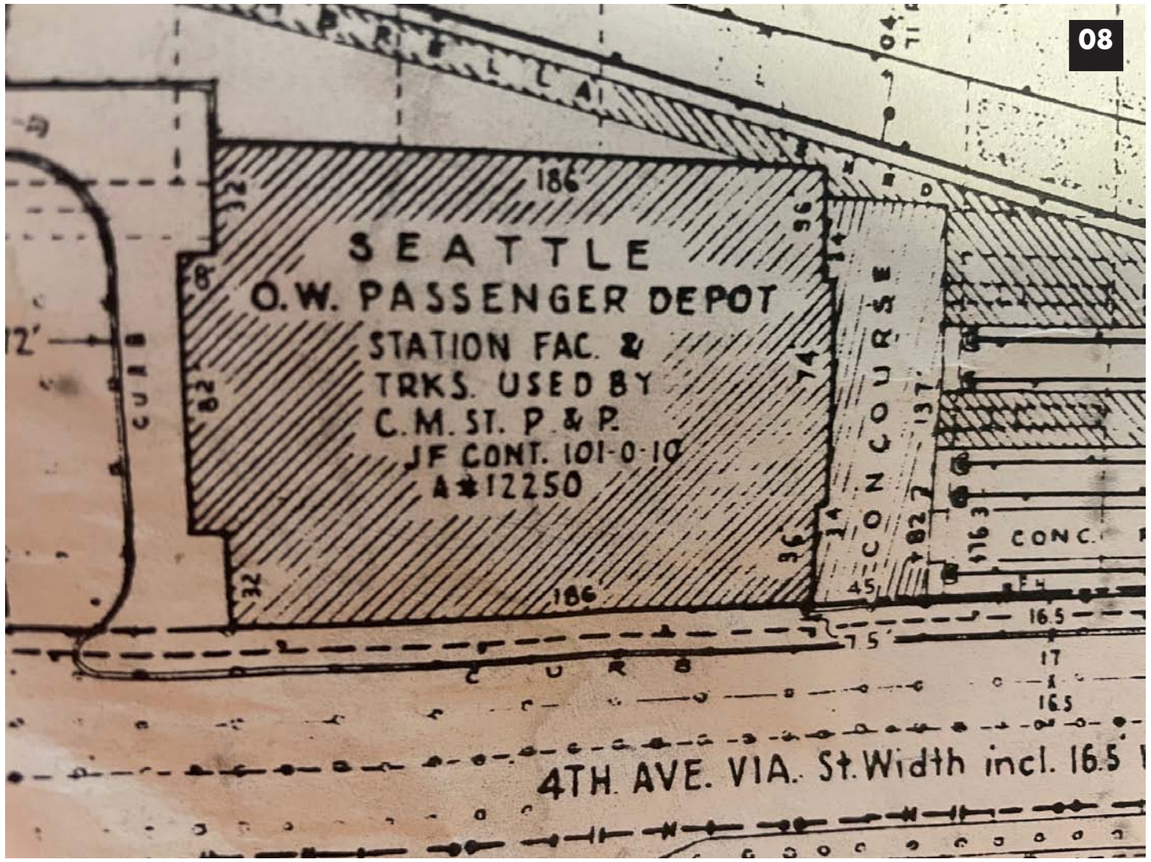
03B

Above. The lower part of the east side of the station is now hidden by new construction.

Above. Seattle Union Station from the southeast.

Above. Seattle Union Station from the south. Ron straightened this image. Kirk cloned the west side, then used a reversed west view to replace the east side and then cloned the reversed view to become the new east half of the south side.To help blend the bricks frm different shotsk, Ron used 3D Paint to lightly airbrush a brick orange color over the brickwork.

"To Downtown Seattle Motor Stair to Waiting Room". A must for a model!



Above. Finding the footprint on a 1:1200 made this project a lot easier. Kirk made his third wood model with 1:1 dimensions that used the scale footprint and assumed each floor averated 13.3' tall. Wood mockups are very useful... and a huge time saver.

09

MACRO
FORMULA FOR SEATTLE UNION STATION

STATION MUST BE REMOVABLE TO ACCESS MAIL STUF WEST OF DEPOT.
BASE OF TRACK IS 1/8" THICK... SAME AS CORK ROADBED.

PLATFORMS ARE 1.5-2" WIDE, SAME THICKNESS.
SPACE BETWEEN PLATFORMS ARE __" WIDE.

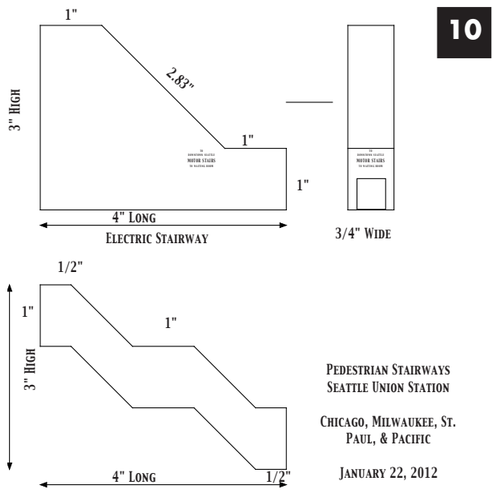
UMBRELLA PLATFORMS ARE 1" ABOVE PLATFORMS.

FORMULA FOR SEATTLE UNION STATION MOCK UP USING 3/4" WIDE PINE.

1. SIDES: 5HX 12.5W
2. ENDS. 5"H X 11" WIDE
3. ROOF: 12.5" X 9.5"
4. SIDE ROOFS 14"L X 1" HIGH... ~2" WIDE
5. SOUTHERN CONCOURSE 2" HIGH, 10.5" LONG, 2.5" WIDE, ATTACHES TO SW CORNER, 1.5" FROM BASE.
6. SOUTH PEAK:
7. SOUTHERN CENTER ROOF: 1/8" X 11" X ~4"
8. NORTH PEAK:
9. NORTH CENTER ROOF: 1/8" X 3"LONG X 4"W
10. STEAP AND ESCALATOR (SEPARATE SCHEDULE).

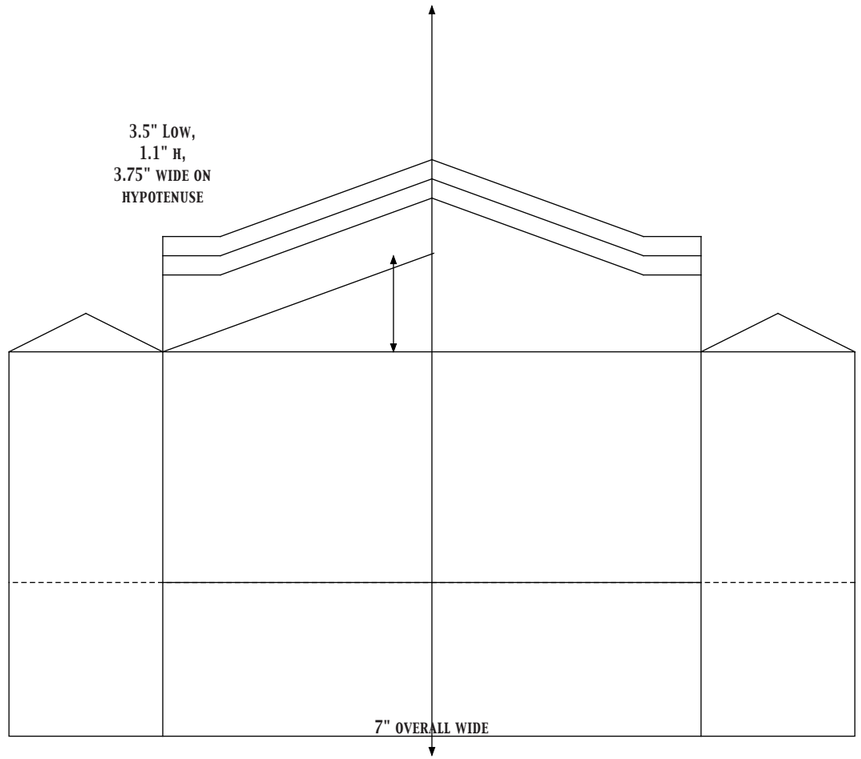
Above. Kirk uses 1:1 measurements to make stand-ins. The thinking is to get the overall look correct and fill in the details later. There were additional drawings before construction.

10



Above. An early drawing of the escalator and stairs that got passengers to and from the waiting room and tracks.

11

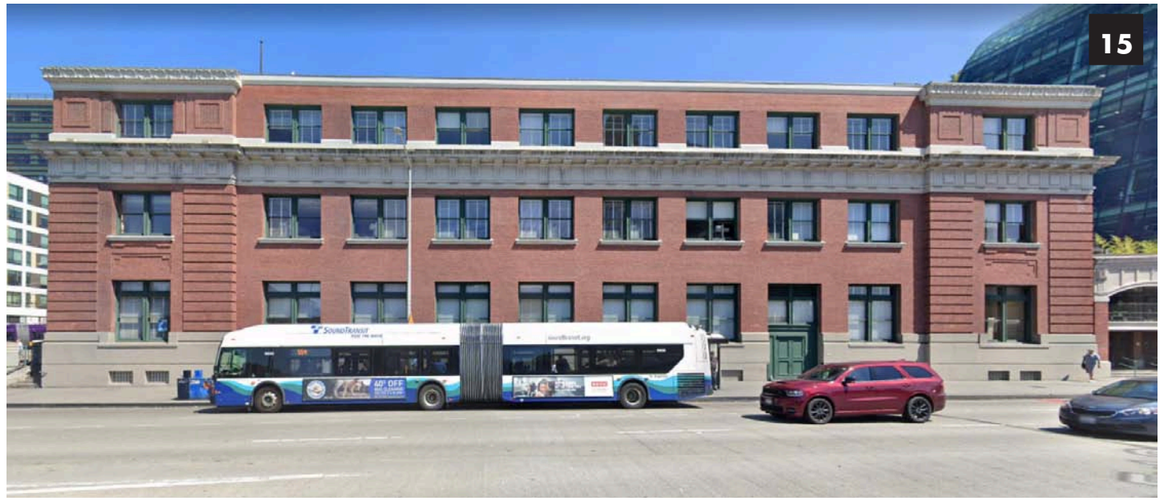


Above. An early drawing to capture the overall shape of the station. 1:1 paper versions were cut out and taped together.

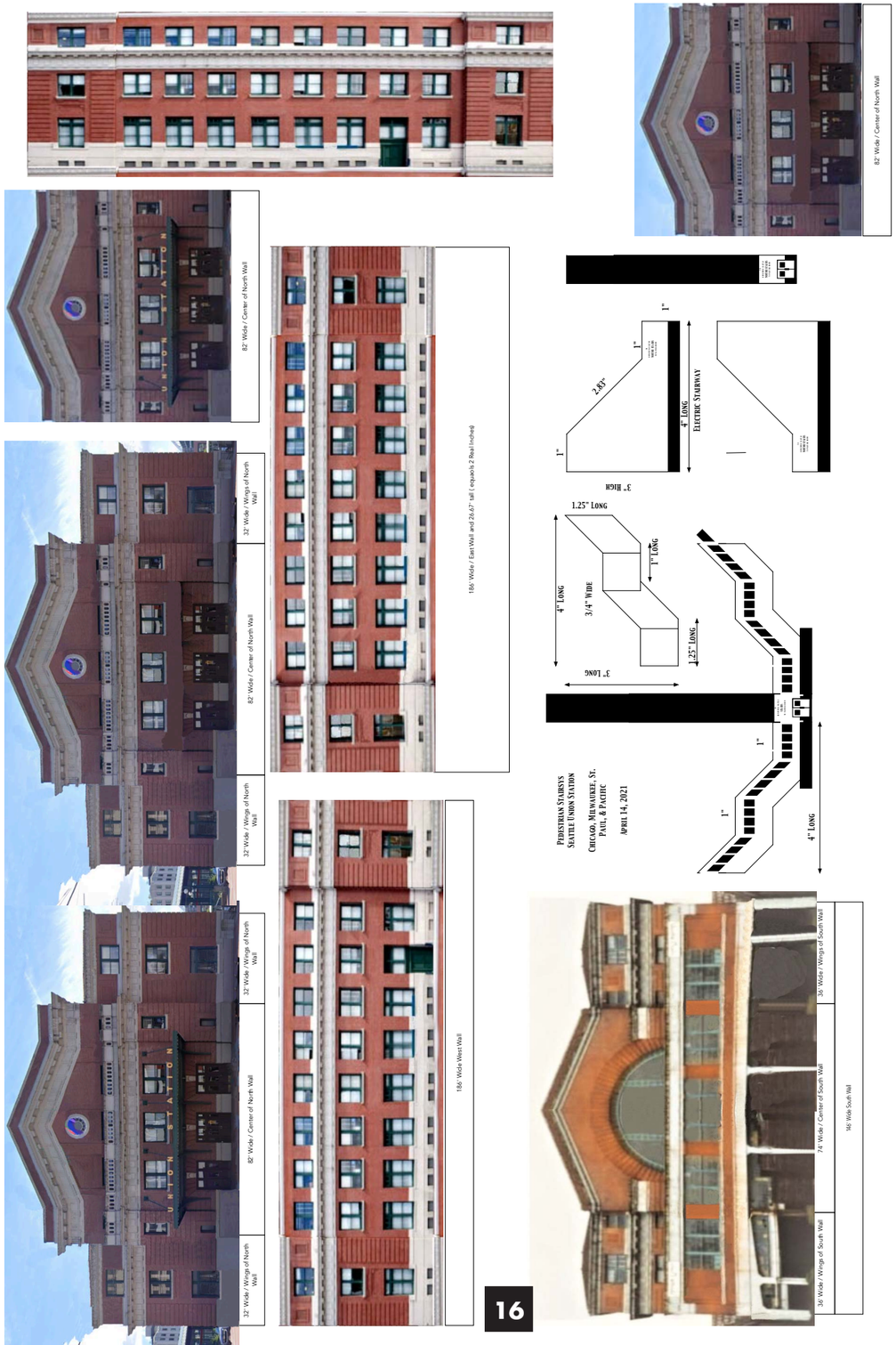
Above. The model of Seattle Union Station is the first scene seen from the "Seattle Door" and located above a 4 1/2 turn helix connecting the upper level (Milwaukee Road east and Union Pacific south) and lower level (NP south and GN north and east).

Above. Station operations are pretty cool... and Kirk is still revising what he thinks happened in 1950. Upon arrival they did split UP 457 so the first class passengers had a shorter walk to the station. I couldn't find my Atlas UP S2.

Over the years we discussed various ways to build a more detailed model of the station. Most were extremely time consuming. Eventually Ron figured that if we could get good enough images we could resize and clone, then mount on a wood box. Ron found most of the usable images, squared them, and Kirk cloned them. For exampkle, on the above image that meant removing the poles, flags, wires, people, and automobiles. The flag hid the clock. This meant that the brickwork is going to be low resolution. But... they will be scale! We realized that the station would be lo rez up close but from a reasonable distance, could be far more accurate than we could draw for 3D printing.

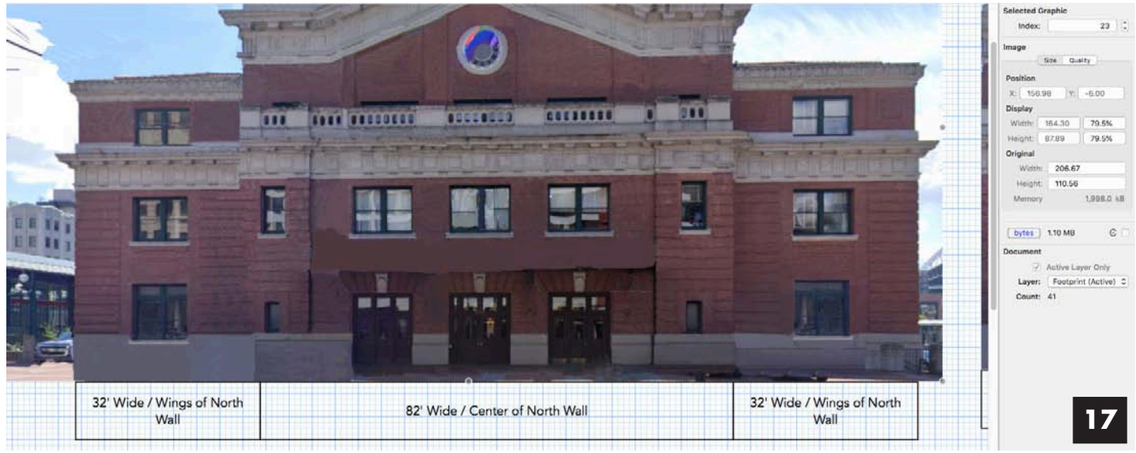


We found mulitple decent images of the west wall. We couldn't find a useful image of the east wall but fotunately there was symmetry between the walls. Ron straigtened and Kirk cloned to get the best west wall we could. Once Ron was happy with the west wall, Kirk copied it and started the east wall. First the image was flipped 180 degrees. The door above the red car was cloned out. For some reason the sky lights above the mezzaine level had to be moved around. Our Fourth Avenue is 2" above the track level. But generally this was easier than anticipated. The south wall was tough but we had a decent west side, worked it over, and copied and reversed it for the east half... and then cloned in the unique features. Kirk used EazyDraw to make a 24" x 36" poster size canvas. See the following page for how each size was resized to 1:160. Lots of dead ends but this step ended up making things surprisingly easy. Then I used Fed Ex Office to print out a pair of posters on flat 100 pound paper.



16

Graphic Professionals can probably do everything in Photoshop and Illustrator but many of us mortals can get by with EazyDraw. A key here was to set scale to 1:160 rather the 3/4": 10'. This allows one to draw the rectangles to scale lengths. Then place the images above them, then resize their width to match the rectangle. Then, as on next page, set the value of the vertical to match theh horizontal... and magically all the verticals lined up for us.



17

Above. This is a screen shot of the north wall. Kirk cloned out most of the detail. Ron pointed out some poor windows that were cloned over. But below the image you can see the rectangles Kirk drew on Eazy Draw. Setting EazyDraw's scale to 1:160 made it easy to draw rectangles 32' and 82' wide. Then the photoshopped image was placed above the rectangles. I pulled the image horizontally so the width matched the rectangles. In the box on the top right, it gave the value of 79.5%. Type in 79.5 for the height and magically I had the correct height. Fortunately all the walls lined up vertically. Ron wanted several versions of the north and south walls and Kirk filled the poster with additional images so Ron had extra windows and doors to literally cut and paste over the model. Kirk tried to draw the lower two levels of the east wall. Ron said don't bother and painted the windows.

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Above. Printed photos will be placed on north face of newly constructed station form. There was a problem with the image as it was taken at a relatively close distance so the "Towers" of the North wall are at different distances from the lens than the pediment layer and the balcony layer, so of are slightly different scales. This was compensated for when the image was laid out for printing. Two versions of the north face were used, one with the marquee and one without. The marquee holds the UNION STATION letters. This panel was affixed to the front entry after the marquee was painted black. Two steel nails were pre drilled and glued into the marquee structure. Matching holes were drilled into the wall just above the entry doors. The nails pin the marquee in place and make it removable. The 100# paper is attached with Mod Podge.

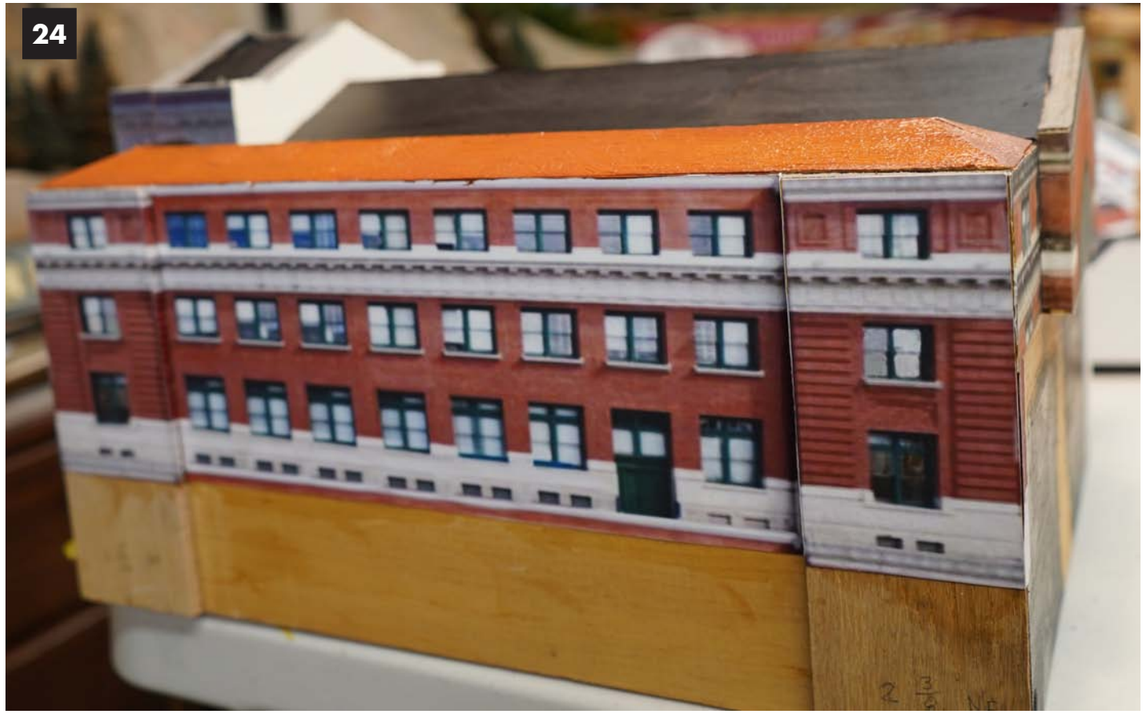
Above. Northeast corner with photos applied shows raw edges of the printed artwork. This view also shows covering the raw edges of the plywood with scrap photo section which was too small for full coverage. Later Ron painted the gap with matching paint.

Above. View of east side showing unpainted roof. The lower east wall and lower south wall are painted with a mixture of acrylic craft paint and Liquitex Basics artist paint tinted to match the photos and other areas with black. The lower east wall windows were laid out with guide lines translated down from the upper windows. The horizontal lines were matched up with the windows from the main floor and the second floor spacing. The guide lines were masked with strips of masking tape then painted with black acrylic.

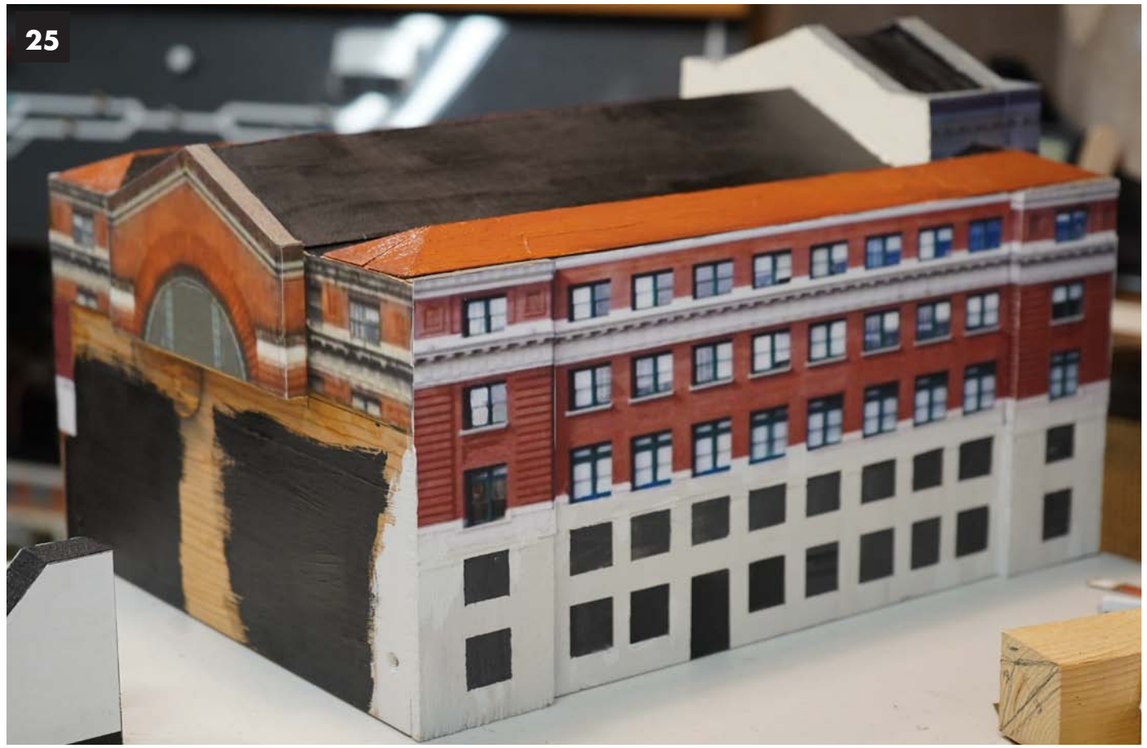
Roof. Center roof meeting the south pediment face. East and west small gables in place. Roof view from the south east shows compound bevels to form the southeast hip roof. Also visible is the south center section with the photo applied and the edges wrapped and meeting the south east tower. Seattle Union Station has two smaller gabled roofs on the east and west sides. Each is covered with curved red terracotta tile only on the outer gable. The outer gable is the only part of the roof visible from the street I captured images of the roofs thinking they also could be covered with photos but impatience prevailed and acrylic paint won the battle though the first color turned out too bright. A remix with medium gray and a tiny bit of Mars Black turned out much better and the remaining orange was used to touch up some of the raw paper edges.

The small gables on the east and west sides were a challenge. The pitch is about 4 1⁄2 -12 or 22 ½ degrees. I ended up cutting the 22 ½ degree beveled strips from a 2x6 then ripping the beveled strips to width on the table saw. Each strip forms half of each small roof. Each small roof turns 90 degrees at the north ends to meet the sides of the pediment structure. This required some complex square and beveled cuts. I marked the cut lines in pencil and followed the lines on the band saw. Each piece was sanded and glued in place. The south ends are bevel cut to form a hip roof.

Above. Ron painted the center roof sections black. The outer sections along the edge are painted a brick color.



Above. West wall with terracotta roof painted. The concept is to make another wood box, mostly with 1/2" plywood. On each end are short sections of wall that stick out. Ron used 1/8" plywood to make these. Once the box is ready, the poster is cut out to be decopaged onto the wood. The door on the right opens onto Fourth Avenue.



Above. The view from the southeast with roof and south wall painted.

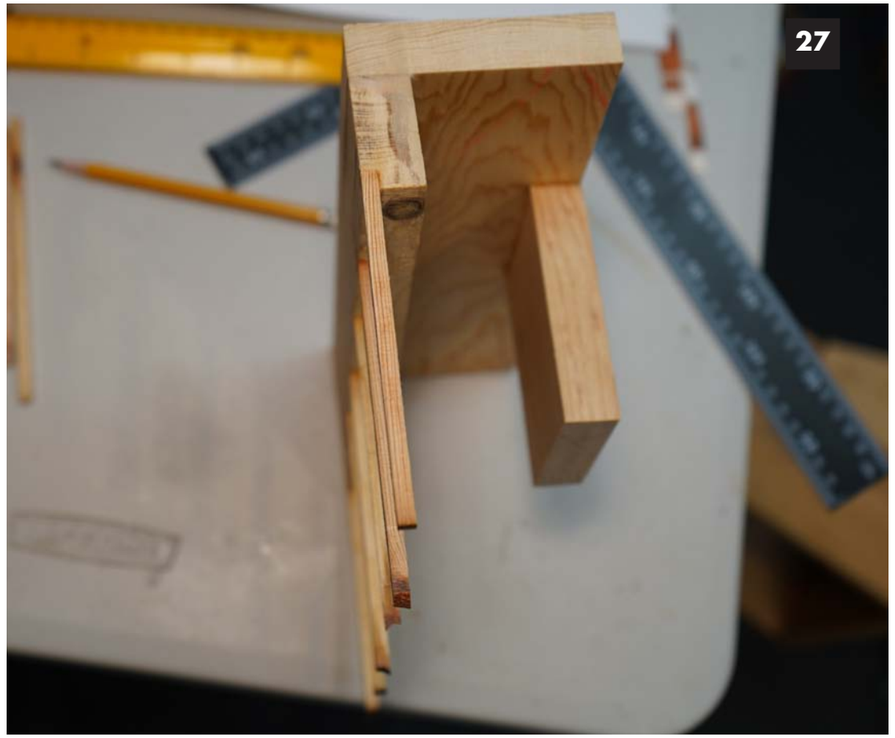
Left. South side of station with concourse in place to find the correct leg length.

On the model the concourse began as an L shaped roof and rear wall. The ends are filled in with 38 in. thick blocks. The south side of concourse is supported with concrete pillar legs. For the model the legs were cut from a ¾ in. pine board on the band saw. A Magna Fence magnetic fence allows quick and easy fence settings for the band saw so making a batch of 5⁄16 x 5⁄16 legs takes only a few minutes. The concourse has a unique curved angles arrangement at the legs on the west end the East end does not share this arrangement so that part was simply trimmed off of the picture on the east side. This left some bare wood that was simply painted over. Locating pillars was done by laying the concourse window photo on the wall and then translating their locations to the south wall face. Joining the legs to the building was done by cutting a mortise for each leg in the south wall with the milling machine and gluing the legs into the mortises with Elmer's Carpenter's Wood Glue Max. This is my go to glue for almost all wood projects. It has super finely ground wood

Continued on next page.

Continued from previous page.

fibers and becomes extremely strong when it dries. The tops of the legs were rounded to match the shape of the mortises. The side of the concourse that meets the south wall is supported with a 1x2-ish block to make the concourse free standing if you wish. This protects the pillar legs if the building should need to be moved. The legs were marked then trimmed to length on the band saw. All wood parts are glued together and the only nails used are the pins holding the marquee. 2 inch sheet rock screws were used to hold the sides together while the glue dried but were later removed.



Above. Side view of concourse without the end blocks in place. The legs and ends of the concourse were painted with the same cream color as the lower east side.

Above. Printed photo over the south face of the concourse with legs attached rear support block is in place.

Left. View from the southeast with the concourse in place.

Left. This View of west side with original station in foreground.

Above. North side with mezzanine in place. The clock above the entry was damaged in the photo shop process so another view of the north entrance was found on Google Street View. The clock was at 12:30 and clear enough to use but oval because of the photo's angle. The clock photo was cropped then stretched to make it round again. A couple of printer checks to get the size right then a literal cut and paste to finish.

Above. East side with concourse and motor staircase.

The Stairway and Motor Stair Case art were printed on off white paper so the sides and entries didn't have to be painted. The stair case art was cut out and the shapes traced onto 3/4 inch boards, cut out on the band saw then painted black and covered with the stair case art.

Images 33-36. These are larger versions of the four images on the first page of this article.

FREMO americaN FALL MEET 2021

Text and Photos by
Peter Gössel, Hagen Langbartels, Heiko Rosemann,
Wolfgang Thede, Marc Thiemann and Dirk Warwel

Image 01. Union Pacific 3021 alongside the Payette River.

Who We Are

The americaN chapter of FREMO has been active since 2003, building modules following North American prototypes in N scale and jointly operating them at meetings. Our modular standard is flexible regarding module size and shape, as long as the end plates are 400 mm wide. The single track is centered at the end plate, has a right angle to it, and is 1,300 mm (roughly 51 inches) above the floor. Two mounting holes and two electrical connectors for track power and DCC ensure technical compatibility.

A few other regulations—like Code 55 or lower profiles, roadbed and ballast colors, flat terrain shape and 1,000 mm (40 inches) minimum radius—help us achieve a uniform look in our arrangements. Based on these simple standards, we have created a great variety of modules built for operations.

2021 Fall Meeting

A few weeks ago we had the very first post-Covid Fremo americaN meeting. The Fremo board insisted on a very strict hygiene concept, so every participant had to be fully vaccinated and be tested 48 hours before the meeting.

But despite these limitations we had a great time, so we wanted to share a few impressions.

In NSR #127 we had described how we use our modules to run trains under "Time Table and Train Order" authority. To accommodate the various interests of our americaN members we agree beforehand on a different era for each meeting.

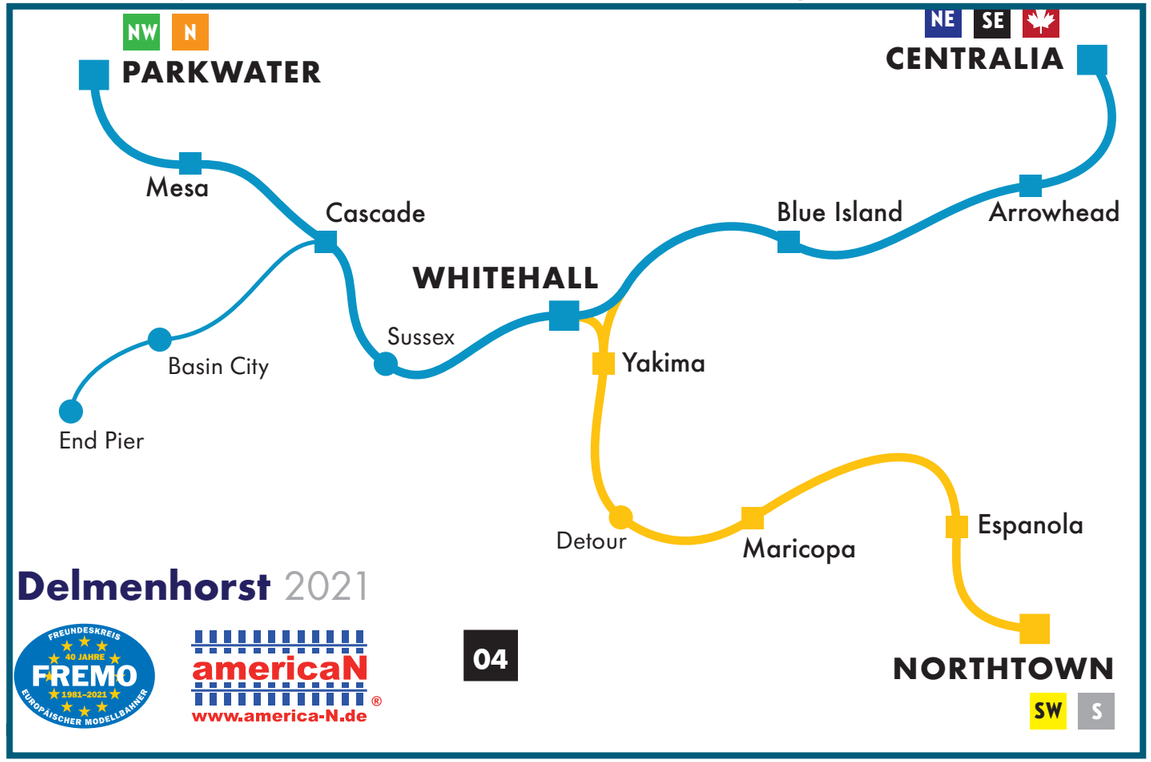
For the 2021 Fall Meeting we had settled on "1969 in the Pacific Northwest". So we would mostly run Great Northern, Northern Pacific and Union Pacific equipment.

As would have been the case in 1969 we used "Track Warrant Control" (TWC) to grant trains permissions to operate on the mainline. The dispatcher transmits the Track Warrants to the crews using radio. NSR #048 JUL/AUG 2008 had an article about our dispatching procedures.

We are in the fortunate situation that we have more modules available that we typically use in one meeting. So we could choose modules with industries that are more aligned with the 1969 time frame; so if you compare this layout with the one shown in NSR #127 you will see many different modules making up our layout. Also most vestiges of steam operation are long gone; even the ice docks and ice houses used to support ice-cooled reefers are torn down as mechanical reefers are becoming prevalent.

Image 02. The Yakima local passes the foundations of a torn down water tower.

Image 03. The Venue The meeting was held in an old power generation station that is today part of an industrial museum in the city of Delmenhorst, a little south of Bremen. We already had two prior meetings in the same museum, but this was the first time we used the “Turbine House”. And it is truly a “Cathedral of Work”
It was built in 1902 for steam engines to generate electricity for a huge wool manufacturing plant replaced in 1929 by the steam turbines we see today. Closed in 1982 it was converted into a museum. So our modules fit right in.



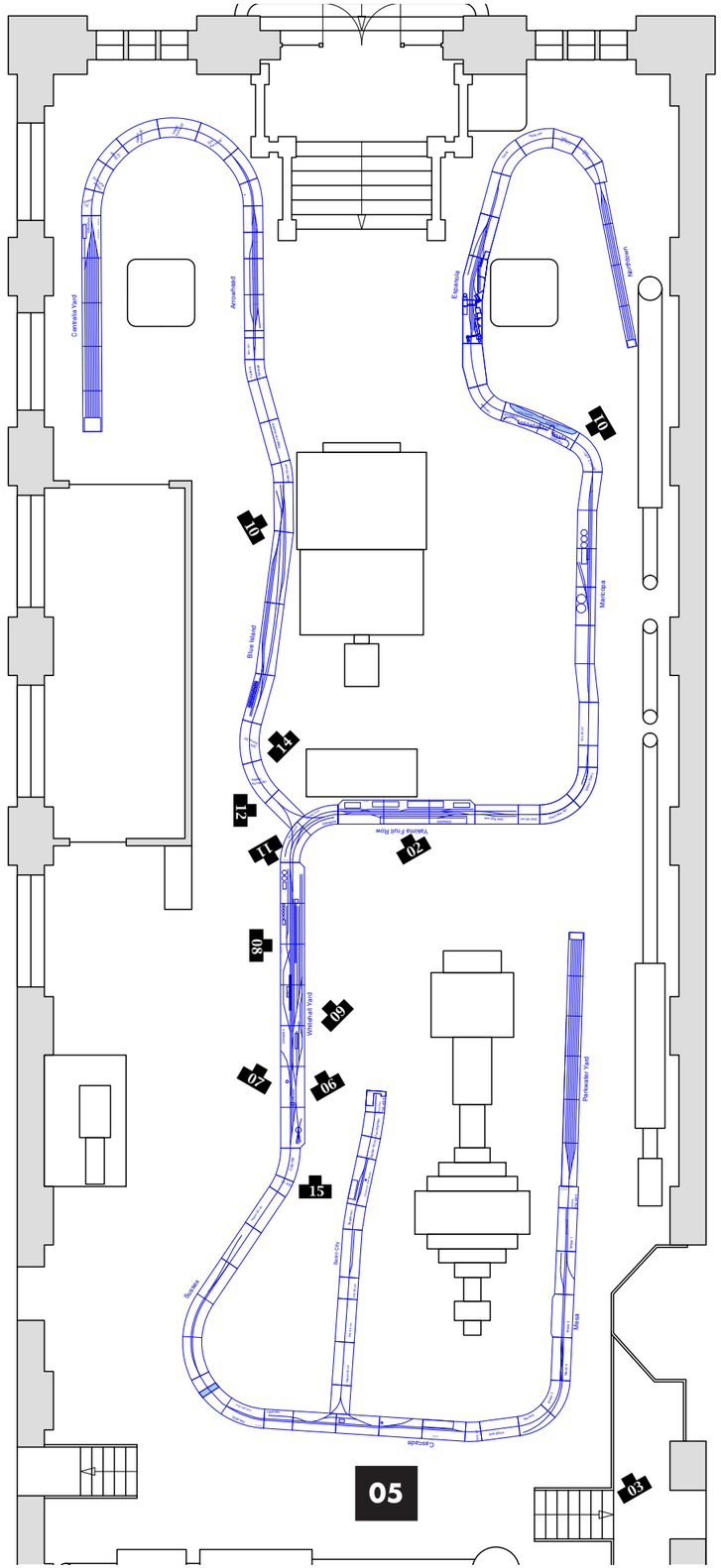


Image 05. The Layout
It was a real challenge to plan the layout around all the machinery, and we learned the Pauli Exclusion Principle and had to revise the layout plan on the fly. But we have enough small, curved modules in reserve to make these adjustments as we build the layout.
The mainline from Parkwater Yard (lower left) to Centralia Yard (upper right) was operated by the Great Northern , the connecting branch from Northtown Yard (lower right) to Whitehall was run by the Union Pacific.
The industry area around Yakima had its own switcher, the station Blue Island was a stop for TOFC traffic. We had tested ideas to make TOFC traffic more interesting. All trailers had independent waybills, so the Blue Island operator had to load TOFC flatcars with trailers depending on their waybill instructions. So every day the TOFC cars had different loads and were routed to different destinations, which made the trains and the Blue Island job more interesting.
Throttles were mostly the latest iteration of the FREMO wiFred, our wireless throttle developed by Heiko Rosemann. Details on this exciting development are provided with image 13.

FREMO – Friendship of European Railway Modelers—is an association of European model railroaders joining forces to build modular arrangements and operate them together following prototypical practice. The founding cell of what, today, is a club joining more than 2,000 model railroaders from all over Europe modeling a multitude of prototypes in scales ranging from N scale to I scale—all with a focus on operations on modules, was a small group of 17 H0 scale German Railways modelers who formed this association in response to a letter to the editor in the January 1981 issue of ***Model Railroader*** magazine.
https://www.fremo-net.eu

Image 06. The Whitehall Yard switcher ready to go on duty.

Image 07. Someone in a green 1969 Mustang starts to overtake a lowboy trailer

Image 08. A TOFC car is being switched in Whitehall yard

Image 09. Double deck auto carriers in Whitehall yard. The cars are 3D prints, designed by Jens Jahn. His handle on Shapeways is "madaboutcars" as of today he has 2599 different N-scale cars for sale.
The 5 cars per deck is actually a one-piece print, so it is easy to remove the string of cars. This concept was developed by fellow modelers to be able to efficiently load open auto carriers. A great way to replicate the colorful and interesting look of the 1960s.
In the background a UP passenger train waits at the station for his connecting train to arrive.

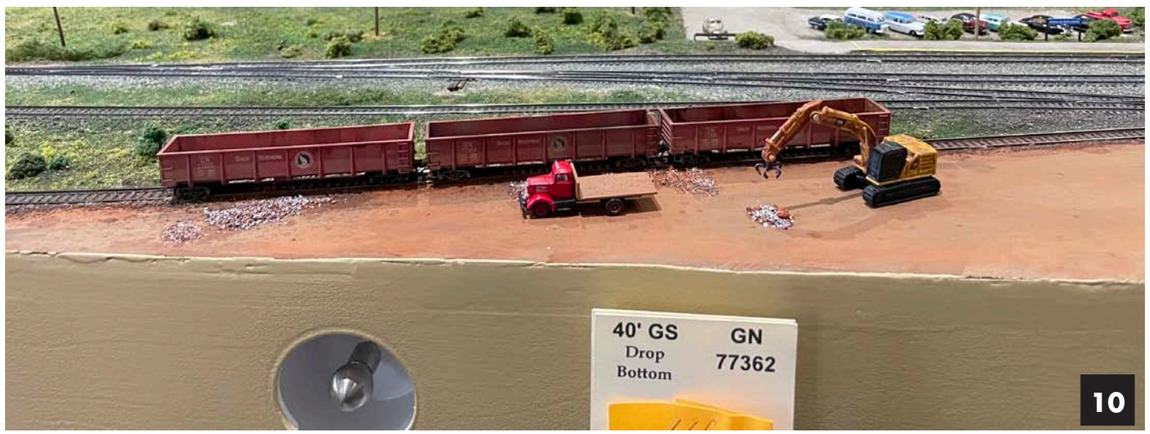


Image 10. A cut of Great Northern gondolas is ready to get loaded with scrap metal at the team track in Blue Island
We use car cards and waybills to move cars over the layout. Each module owner creates a set of waybills specifying in-bound and outbound cars that each of his railroad customers has ordered. Each module has places for the car cards so the train crew can leave the car cards with the cars once they are delivered to the correct spot.

Image 11. The Whitehall yard crew prepares the next train that will leave the yard. A local freight holds the siding, ready to depart to Centralia.
Some Locals were up to 50 cars long. This might not sound a lot by NTRAK standards, but we have to switch these trains. At some stations the freight locals were longer than the siding. This was not only a challenge for the train crew but also for the Dispatcher as it became difficult to move other trains around the locals.

Image 12. With the Wye and the diverging routes, Yakima was at the center of the action. The local switcher that serves the fruit industry returns with loaded reefers to Whitehall where they will be added to the outbound trains to reach their destinations.

Image 13. wiFred - the Fremo DIY wireless throttle

Since the late 1990s, we at Fremo have been running operating sessions on our modular layouts with Digitrax Loconet and DIY throttles called FRED and FREDI. Those DIY throttles can be plugged in everywhere along the layout and operate one specific loco each, with an excellent look and feel for speed and direction control, limited confusion for newcomers and very little potential to accidently run a different loco a couple of hundred meters away.

Model railroaders running JMRI already have the capability of connecting their smartphone or tablet as a wireless throttle to their layout. However, for Fremo operations we did not want to give up the direct relationship between throttle and locomotive nor its excellent and familiar haptics and ease of use, so beginning in 2018 Heiko developed the wiFred using the same form factor as the Fredi.

The wiFred will connect to a JMRI wiThrottle server, acquire up to four locomotives and run them wirelessly together as a consist. Power for up to 20 hours of operation comes from a LiPo cell that can be charged through a USB-C connector, configuration is done with a web server on the device, powered by an ESP32-S2 WiFi chip. It's an open source DIY project, all hardware schematics, PCB layouts, firmware and source code are available on github at https://github.com/newHeiko/wiFred and more detailed description can be found at https://newHeiko.github.io/wiFred/documentation/docu_en.html

We've run up to 17 wiFreds simultaneously, unchaining the operators from their cables and enabling them to stay closer to their respective locomotives and trains they were operating, and we expect to run the first fully wireless module meetings in 2022.

FREUNDESKREIS
35 JAHRE
FREMO
1981–2016
EUROPÄISCHER MODELLBAHNER

FR reundeskreis
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Within FREMO there are multiple sub-groups for various scales, time-frames and geographies… Here is an overview on the multitude of groups https://www.fremo-net.eu/en/modular-systems/ So we are the americaN group of FREMO

Image 14. A Burlington unit pulls past the huge elevator at Blue Island; it is grain harvest season, so many hoppers are filled with export grain.

Image15. The team discussing the next moves at Whitehall.

Finale. So we had a great time; we were only 8 participants, so we had a LOT of layout per person. There was little rest between jobs, everyone was kept busy and entertained. We thoroughly enjoyed getting together again to "play with trains" for 3 days after a long hiatus.

TRAVEL GUIDE N EVENTS

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

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

N HORIZONS

Kato USA.

June 2022 should see a new run of the MAXI-IV Well Cars in BNSF Swoosh and TTX with containers in Florida East Coast, Crowley, CN, and CP.

Walters. January 2022 should see a pair of modern industrial building kits. Both have outside loading for trucks, the second also has interior loading for railcars.

SEE YOU NEXT ISSUE!