

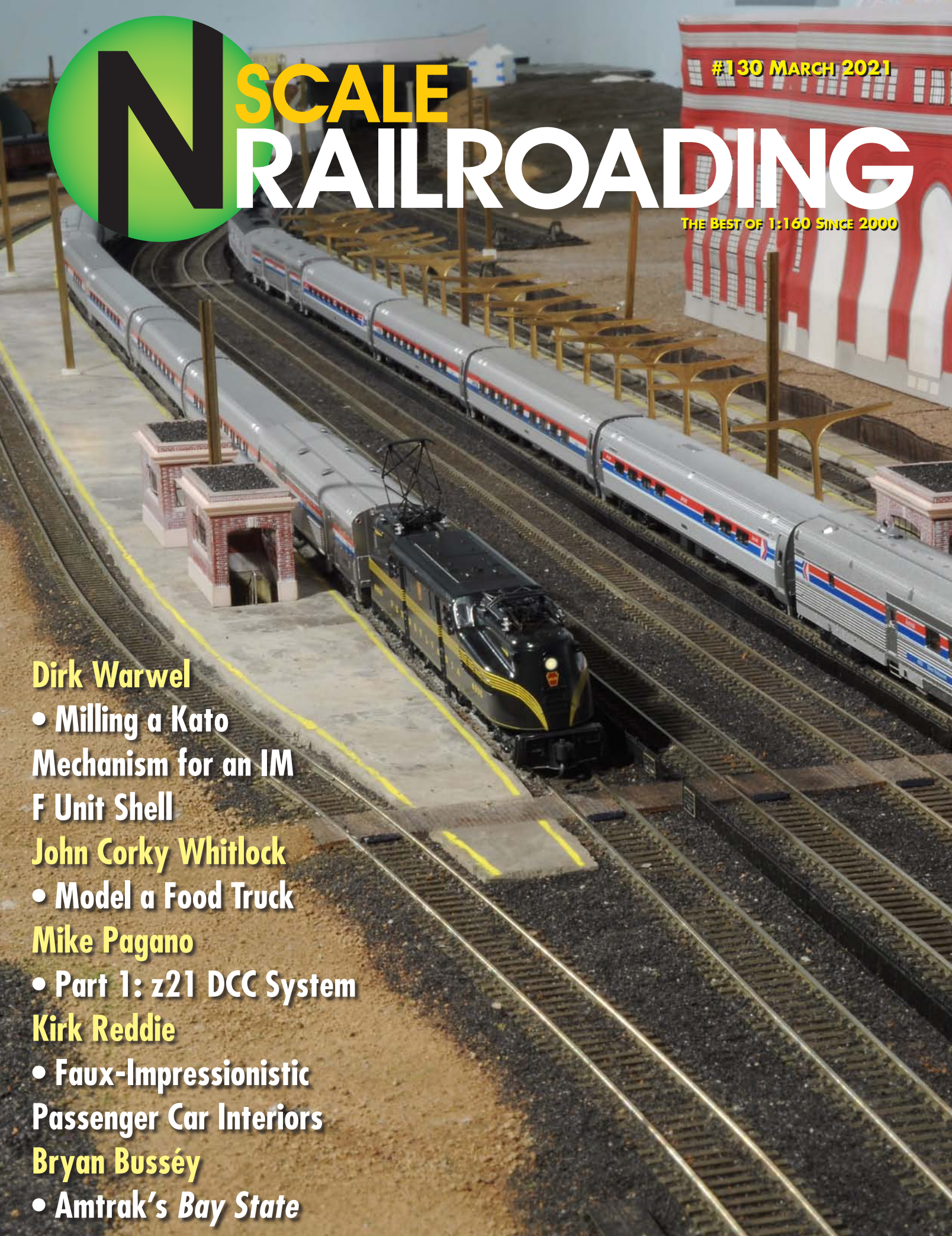


SCALE

RAILROADING

#130 MARCH 2021

THE BEST OF 1:160 SINCE 2000



Dirk Warwel

- Milling a Kato Mechanism for an IM F Unit Shell

John Corky Whitlock

- Model a Food Truck

Mike Pagano

- Part 1: z21 DCC System

Kirk Reddie

- Faux-Impressionistic Passenger Car Interiors

Bryan Busséy

- Amtrak's Bay State

N SCALE RAILROADING WELCOME!

The cover makes me want to go buy a ticket and ride Amtrak somewhere. Bryan is an excellent modeler and photographer and I hope to share his future projects. Most of his *Bay State* is off the shelf models which took some time to gather. His diner was a project and he describes how that was modeled. Having accurate trains operating through an accurate looking station.... Wonderful!

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

AD INDEX

**GREAT BEACH!
START YOUR
SURFING HERE!**

Atlas	05	www.atlasrr.com
Blair Line Products	19	www.blairline.com
Bluford Shops	17	www.bluford-shops.com
Digitrax	15	www.digitrax.com
Factory Direct Hobbies	07	factorydirecthobbies.com
Fifer Hobby Supply	19	www.fiferhobby.com
Fleischmann	11	www.fleischmann.de
Kato USA	03	www.katousa.com
Lombard Hobbies	17	www.lombardhobby.com
www.modeltrainstuff.com	17	www.modeltrainstuff.com
N Scale Architect	19	www.thenarch.com
N Scale Division	15	www.nscaledivision.com
N Scale Enthusiast	13	www.nscaleenthusiast.com
N Scale Supply	17	www.nscalesupply.com
NRail (NTRAK)	41	NRail.org
Rapido Trains	09	www.rapidotrains.com
Sid Sculpts	19	www.SidSculpts.com

Welcome to *N Scale Railroading* #130, the March, 2021 issue. We've completed the first year in digital format.

Page 04. **Dirk Warwel** starts us off with how he milled and reworked Kato F unit chassis to fit under Intermountain F unit shells.

Page 23. **John Corky Whitlock** wanted a food truck to service his SPB & TB.

Page 24. **Mike Pagano** shares his introduction to the new Fleischmann Z21 DCC system.

Page 27. I came across several old projects that I realized I wanted to finish. Now we have great plastic interiors to cut up and customize to complete passenger cars.

Page 35. I knew **Bryan Bus-séy** is working on some very intensely modeled passenger trains but his *Bay State* was ready for public viewing and I'm pleased to share it here.

Page 41. **NHorizons**.

Page 42. **NCalendar and Observations**. "Sometimes the Tracks to Success Are Not Tangent." ▶

**N SCALE
RAILROADING**

March
2021
ISSUE 130

PUBLISHER & EDITOR
Kirk Reddie
nscalerailroadn@aol.com
Mr. Answering Machine
206•364•1295

ADVERTISING SALES MANAGER
(ADVERTISING ONLY)
Denny Hamilton
262•347•1068
nsrdennyads@aol.com

PREVENTOR OF GARBALANCHES
Elaine R. R.

SUBSCRIBER #130
Vernon Salge

***** Talent Emeritus *****
ISSUES 001-117
ART DIRECTOR
Bill Edgar

PHILOSOPHER KING OF HUE
Spencer Rossman

SLAYER OF UNINTENTIONAL
GRAMMATICAL ATROCITIES
Dennis Hartnett

SUBSCRIPTIONS:
N Scale Railroading is a free monthly digital periodical, but it is still copyrighted.
Back issues will still be available at nscalerailroadn.com

Contributing to NSR:
We welcome your contributions including articles and high resolution photos. For information email us at:
nscalerailroadn@aol.com

We assume no responsibility for the safe return of unsolicited materials. We assume unsolicited materials are intended for publishing by **N SCALE RAILROADING**, and that letters, questions, news releases, and club news are contributed gratis. For details, visit contributing at:
nscalerailroadn.com
Copyright 2020
North American N Scale Publishing. All rights reserved.

N Scale **NEW RELEASE!**



MAERSK Intermodal Delivering N Scale Fun to your Layout!

In June of 2002, the repurposed SDP40F BNSF #6976 was removed from storage and painted into a special "Maersk" paint scheme to commemorate the opening of the shipping company's new container terminal in Los Angeles, where it was paired with NS's SD40-2 #3329. Now, almost 20 years later, these two engines can be rejoined again in N scale with new releases of the N scale SD40-2 NS "Maersk" and SDP40F BNSF "Maersk" locomotives along with a complement of Gunderson MAXI-I well cars, also wearing the logistics company's signature robin's egg blue paintwork.

These latest releases of the SDP40F and SD40-2 are both available in standard Analog variations, as well as with Kato-installed Ready-to-Run DCC and even DCC and Sound via Special Order (contact your preferred hobby retailer to order!)



**EMD SD40-2
Norfolk Southern #3329**
"MAERSK" - Newly re-released this February, this engine joins the previously released SDP40F #6976 engine that was also painted into the Maersk livery.

Item #	Description	MSRP
The EMD SD40-2 is a being re-released this February in DC, DCC, and ESU LokSound Variations		
#176-4959	N EMD SD40-2 Mid "MAERSK" #3329	\$120
#176-4959-DCC	N EMD SD40-2 Mid "MAERSK" #3329 w/ Digitrax DCC	\$200
#176-4959-LS	N EMD SD40-2 Mid "MAERSK" #3329 w/ ESU LokSound	\$320
The EMD SDP40F is also available in MAERSK paint, in DC, DCC and ESU LokSound Variations		
#176-9241	N EMD SDP40F "MAERSK" #6976	\$125
#176-9241-DCC	N EMD SDP40F "MAERSK" #6976 w/ Digitrax DCC	\$205
#176-9241-LS	N EMD SDP40F "MAERSK" #6976 w/ ESU LokSound	\$325

Operate your MAERSK Intermodal trains with new release MAXI-I's from Kato USA

#106-6198	N Gunderson MAXI-I 5-Unit Well Car - MAERSK #100029	\$150
#106-6199	N Gunderson MAXI-I 5-Unit Well Car - MAERSK #100043	\$150

Check out these other MAXI-I releases coming soon from Kato USA!

#106-6194	N Gunderson MAXI-I 5-Unit Well Car - BNSF "Swoosh" #238615 with 10 x ONE Magenta containers - Available April 2021	\$150
#106-6195	N Gunderson MAXI-I 5-Unit Well Car - BNSF "Swoosh" #238693 with 10 x ONE Magenta containers - Available April 2021	\$150
#106-6196	N Gunderson MAXI-I 5-Unit Well Car - TTX "New Logo" #759324 with 10 x ONE Gray containers - Available April 2021	\$150
#106-6197	N Gunderson MAXI-I 5-Unit Well Car - TTX "New Logo" #759350 with 10 x ONE Gray containers - Available April 2021	\$150



Kato's MAXI-I Well Cars roll seamlessly and smoothly whether empty or full thanks to their steel-plastic compound wells. Enjoy operating a proper Maersk intermodal train using these well cars with the Kato SDP40F and SD40-2 models, or you can select from a variety of other available road names, all of which include uniquely painted 40' Magnetic Intermodal Containers.

FITTING AN INTERMOUNTAIN F-UNIT SHELL ON A KATO MECHANISM

by Dirk Warwel/ Images by Author



01

During a recent bull session the discussion turned to the question if it would be possible to fit an Intermountain F-Unit shell on a Kato mechanism.

Intermountain offers a lot of unique paint schemes, but a very good friend wants to standardize all his F-Units on Kato Mechanisms for consistency in performance and ease of maintenance. So we decided to test what it would take to combine the two.

My friend provided Intermountain shells, decorated in the beautiful Northern Pacific “Pine Tree” scheme. One shell was slightly damaged which I planned to repair as part of the conversion. I had a few unused Kato SP F-Units that we could use for the experiment. Referring to Gordon Bliss excellent article in N Scale Railroading #120 they are first run F7 from 1992 in the blue box. They are excellent pullers, although a little noisy compared to later models.

Image 01. It must be 1949. That year the F3 ABB received a new F7A unit. The number on the F7A is of course wrong (should also be 6501), but re-numbering is for another article.



02

Image 02. The Starting Point

The three Northern Pacific shells are from Intermountain and the Southern Pacific shells were from my old Kato F7s. First up is milling the chassis for a friction fit inside the Intermountain shells.

Available This Spring from



New Haven

Atlas Master® N NE-5 Caboose



Boston & Maine



Chicago Great Western



Chicago & North Western



Wisconsin Central



Penn Central



Visit www.atlasrr.com today and sign up to become an Atlas Insider! We'll deliver the latest Atlas news directly to your email inbox!

ATLAS MODEL RAILROAD CO, INC. • 378 Florence Ave., Hillside, NJ 07205 • www.atlasrr.com



Image 03. Measuring

I used my calipers to measure the frame and the shell. The Kato frame is 17.1mm at the widest areas, the Intermountain shell is 16.5mm wide.

As I was aiming for a friction fit of the shell on the milled down frame the measurement had to be somewhat precise, so the calipers really helped.

Based on the initial measurements we concluded that only a 0.6 millimeters had to be filed away and that the conversion should be possible.

So I came up with the following “Task List”:

- Fix the NP Shell
- Disassemble and prepare the Kato mechanisms
- Mill the frames
- Change the Headlights from yellow to white
- Install new couplers to shorten the distance between units
- Paint the tanks and truck sideframes; the SP units are grey, the NP units should be black
- Reassemble and test



Image 04. Fix the NP Shell

The NP Shell was damaged at the rear, possibly by the frame cracking. I had a few Intermountain F3s that had developed the same issue. Upon contacting them Intermountain replaced the frames for me.



Image 05. I used regular plastic cement to close the gap, which still required a little touch up on the paint. I have used Reading Green, GN Green and BNSF Yellow to match the Intermountain colors. The GN Green is a little bit too light on the F3, but would be perfect on the F7.

Over 1850 Athearn items IN STOCK
& AVAILABLE FOR PREORDER for \$0 down.



FACTORYDIRECTHOBBIES.COM

PREORDER
TODAY



N SCALE EMD SD70ACE
ARRIVING JAN 2021 in limited quantities



06



Image 06. The shell repair under magnification. Light weathering will blend it in even further.

07



Image 07. Disassemble and prepare the Kato mechanisms. Please refer to Gordon's article in NSR #120 on how to disassemble the engines. He has provided a very detailed description of the process. Also it might be a good idea to do the basic maintenance that he has described.

I have marked the areas I had to grind away. Front and rear of the frame are 0.5mm too wide, so I had to remove 0.25mm per side to have the shell sit centered on the frame.

In the lower middle fuel tank area I had to remove a combined width of 0.1mm, so 0.05mm from each side. This is so little that

it might be possible to leave it alone, but to ensure a straight fit I went ahead and remove a little material.

In addition I had to shorten the frame by 1mm, so I decided to cut that away from the back of the engine.

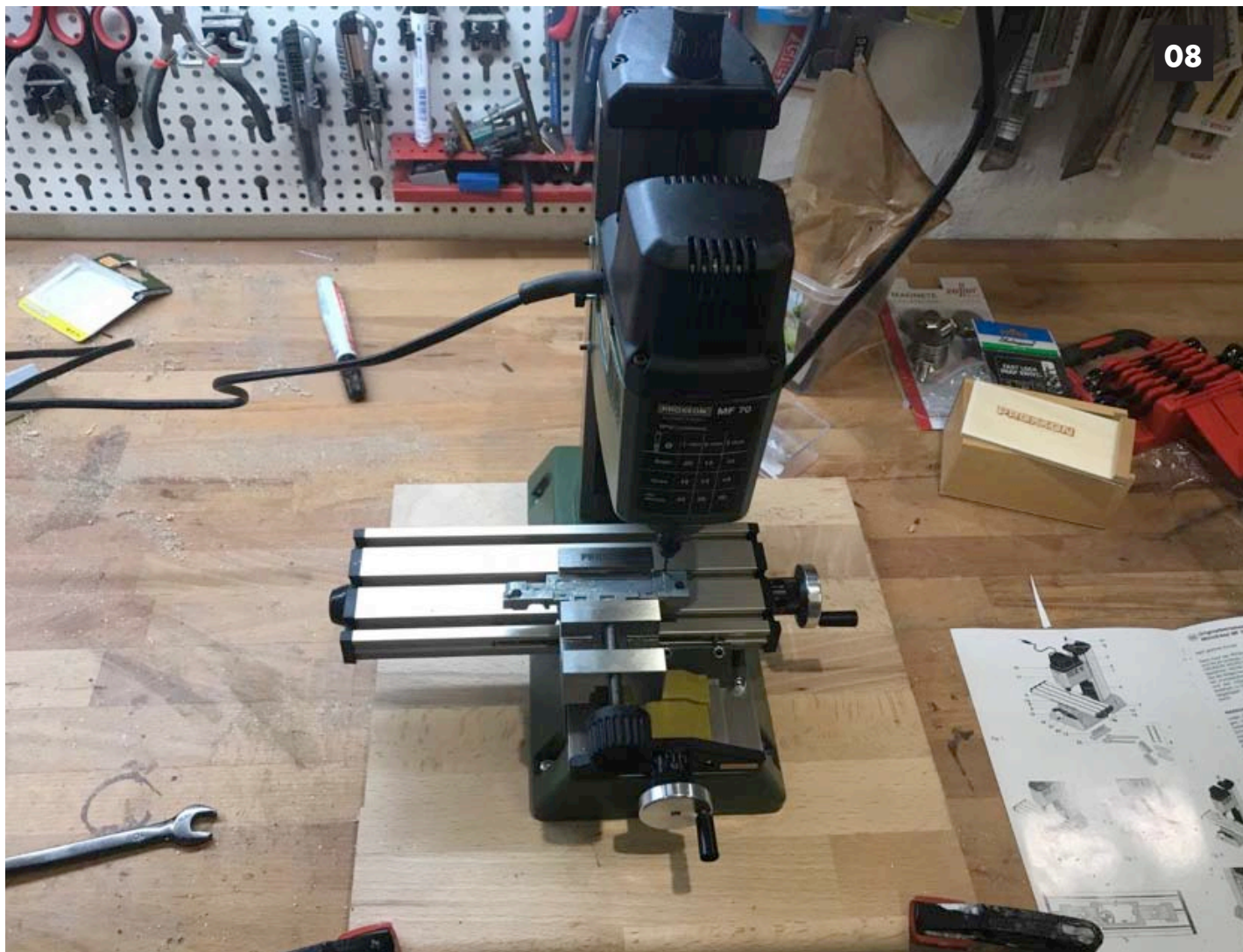
The nose contours are slightly different. I tried to carefully protect the mounting for the front coupler clip so I used small jeweler's files rather than the mill to re-shape the nose. Later it became apparent that the coupler clip will not fit inside the shell, so I could have used the mill instead.

NEW LOOK BUS



*PRE-PRODUCTION SAMPLES SHOWN, SUBJECT TO CHANGE.

[CLICK HERE](#)



09



Image 08. I have used my Proxxon MF70 with a 2.0mm tungsten bit for all the milling. I am not a trained tool maker or fabricator; if you have your own methods and tools for milling you will probably achieve better results than I did.

Image 09. The frames are held by a vise mounted to the x-y table.

FLEISCHMANN



Electric locomotive 193 525-3, SBB Cargo International



739283 =
739353 = 🔊

Electric locomotive 193 776-2, Lokomotion



739284 =
739354 = 🔊

Pocket wagon T3, AAE



825057

Pocket wagon T3, AAE



825062

COMBINED TRANSPORT

Combined transport is not only increasing more and more in the real railroad! At FLEISCHMANN you will also find an extensive range of models for the current freight traffic. Check out the modern electric locomotive Vectron or the pocket wagons of the type T2000 and T3 as well as the container carrying wagons of the Sgns design. This colorful traffic can now be recreated in scale of 1:160.

We also deliver conveniently to your home. Just visit our e-shop: www.fleischmann.de
You are only a few clicks away from your desired model!

All images show photomontages

For stores that do not appear on our websites please contact:



Heartland Hobby Wholesale - www.hhwonline.com
1-800-713-8274

Legal Notice:



TRADITION AND PASSION

10

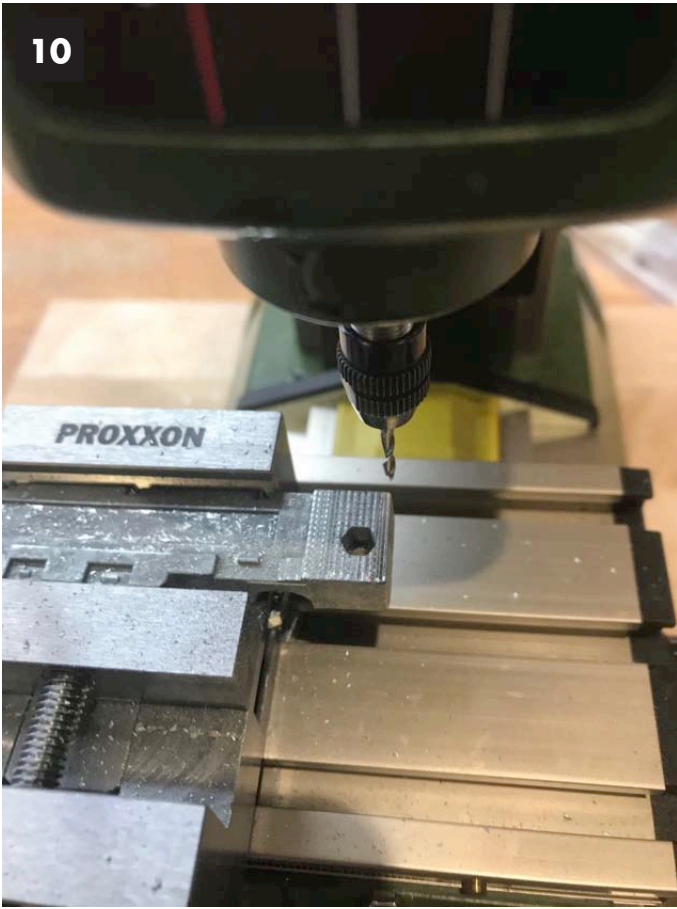
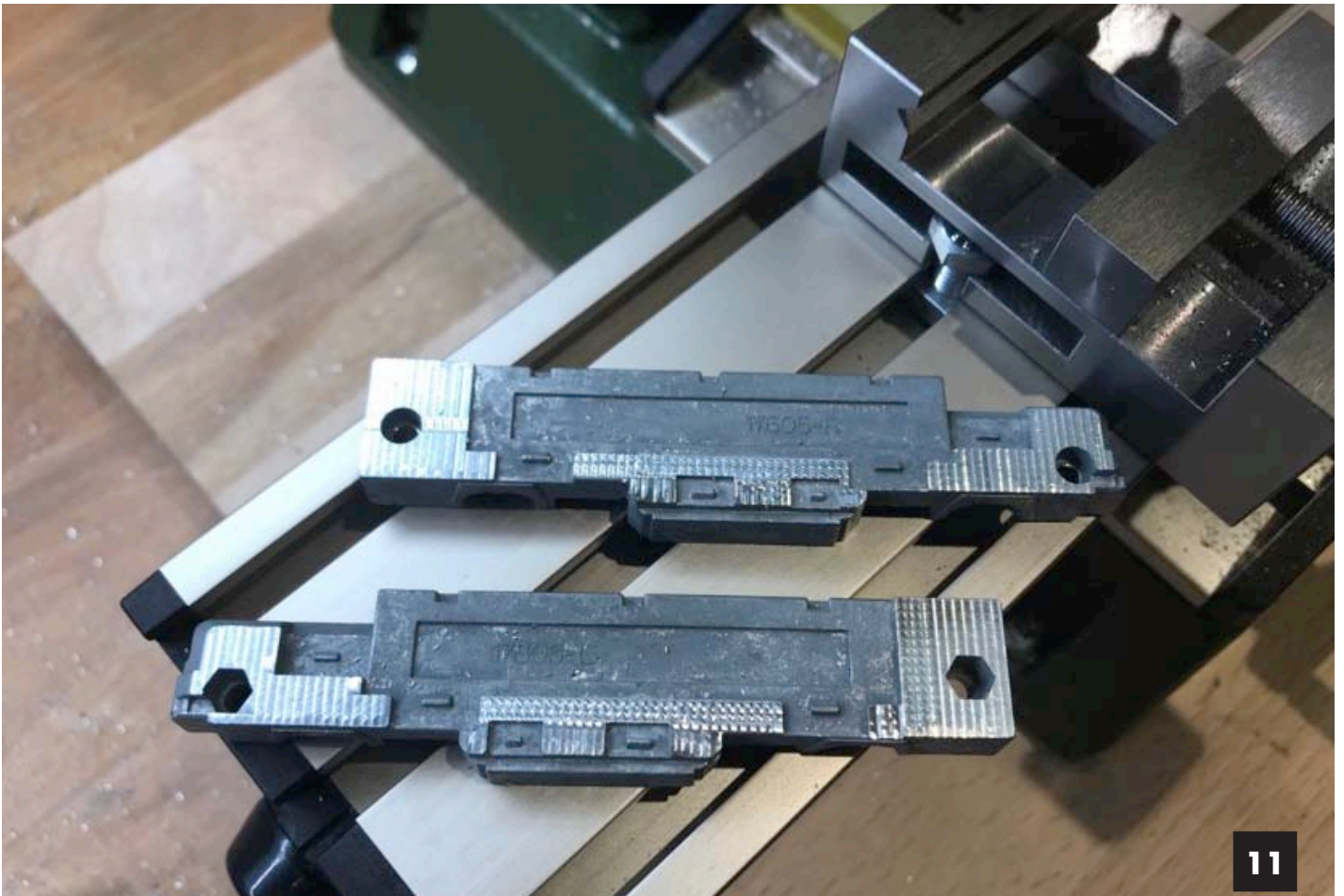


Image 10. The depth is set according to the measurements mentioned above.

Image 11. Milling on the sides completed.



11

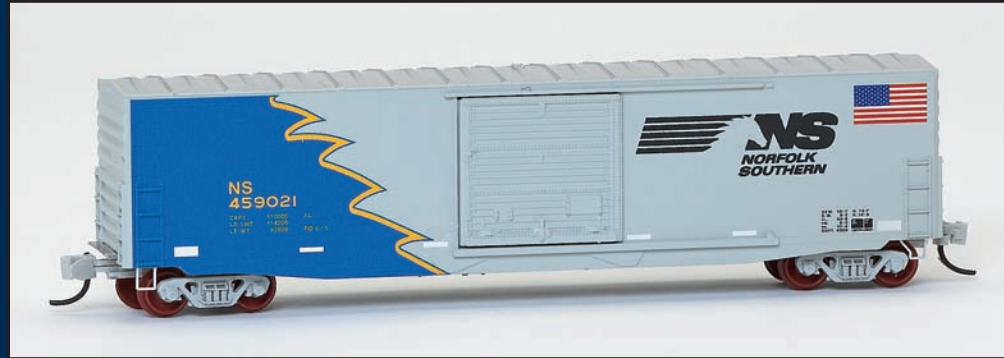


Membership has its benefits!

If you are an N Scale Enthusiast, and every Ntrakker is – You should share your passion for your favorite scale by being a member of The N Scale Enthusiast!

Working to preserve the history of N Scale, and grow the scale along with our friends at Ntrak, we offer mega benefits to the membership:

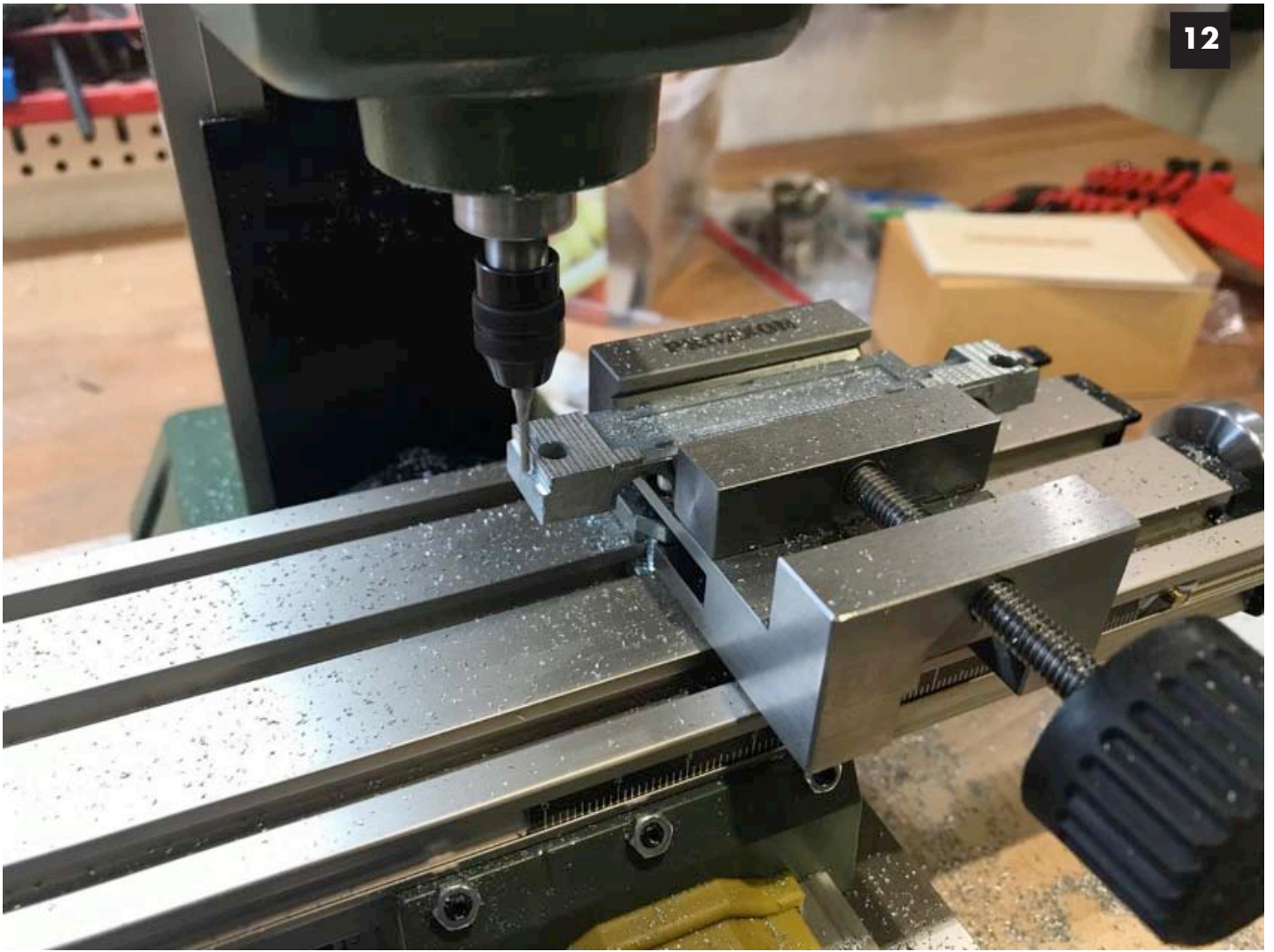
- A very informative magazine 5 times a year!
- Manufacturers and Latest releases in every issue
- Member only Special Runs both prototype and fantasy
- Multi Medium Special Runs that are scratch-built on a grand scale
- Member listings in the Trovestar peer to peer marketplace
- Annual Membership car included at no extra charge
- National N Scale Convention annually
- Free Classified Ads- For Sale and Wanted listings
- Web Resources



Join up for more N Scale Fun!

The N Scale Enthusiast
P.O. Box 30489
Savannah, GA 31410

www.NScaleEnthusiast.com



12

Image 12. The ends are shortened by 1.0mm, using multiple shallow passes.



13

Image 13. Milled frame back on the workbench. Repeat 2 more times for an A-B-A unit. Once the mill is set up milling each frame half took me about 10 minutes, so it goes fairly quickly.

NEW KATO F7 A+B SETS w/ DCC & SOUND OPTIONS



KATO has announced a new run of EMD F7A + F7B Sets with delivery estimated for August 2021. Road names are Union Pacific, Southern Pacific, Milwaukee Road and the stunning Baltimore & Ohio scheme shown above. These are freight schemes and will have accurate headlight and pilot configurations specific to each road name. They can be special ordered with DIGITRAX DCC or ESU LokSound. Pre-orders are now open for these classic first generation diesel locomotives. Visit our website today and reserve yours!

THE N-SCALE DIVISION

nscaledivision.com

Only the Best
FOR LESS Since 1992

Digitrax The EVOLUTIONTM of Starter Sets

Complete Train Control

The next Evolution in Complete Train Control[®]

- Premium Advanced 5/8 Amp Starter Sets.
- Throttles include a Color 2.4" LCD Screen.
- Starter sets are available as standard tethered or duplex radio.
- The system features a DCS210+ Advanced Command Station, DT602 series throttle, and includes a power supply to make getting started easier than ever.
- The DT602 series throttles can be purchased separately from the Starter Set.

Find out more @ www.digitrax.com



Evolution Express (shown) | \$460 MSRP

Standard Set Includes: DCS210+ Advanced Command Station, DT602 Super Throttle with Color Screen, UP5 Universal Panel, PS615 power supply, and a PS615 power supply.

Evolution Express Duplex | \$645 MSRP

Duplex Set Includes: DCS210+ Advanced Command Station, DT602D Super Duplex Throttle with Color Screen, UR93 Universal Panel, and a PS615 power supply.

THANKS FOR SUPPORTING
THOSE WHO SUPPORT
N SCALE RAILROADING



14

Image 14. The Intermountain unit have a slightly different nose contour, so use a jeweler's file to remove some material from the frame. Test-fit often to make sure that it will fit without a lot of pressure. The inside of the shell has a vertical raised strip behind the cab doors; I removed them for a better fit.



15

Image 15. This is what we are looking for: a nice, level fit of the shell.

Pre-Orders are now open...



Conrail Shared Assets red, New York CentralALERT, BN left logo, C&EI buzz-saw, Rock Island ph.3, SP orange bay, C&NW red with yellow lettering, NC&StL, L&N, N&W post-'71, Southern transition era with Roman lettering, and SOO bandit. See our website!



BLUFORD SHOPS

www.bluford-shops.com
Craig@bluford-shops.com

LOMBARD



HOBBIES

**Big Inventory
Value Pricing
Fast Shipping
Great Service**

www.lombardhobby.com



630.620.1084

524 E. St. Charles Pl., Lombard IL 60148

30,000+ Products In-Stock?
Real-Time Inventory?
Great Prices?
Check, Check & Check.

Why shop anywhere else?



modeltrainstuff.com 888.410.2672

VISIT OUR RETAIL STORE

LARGEST SELECTION OF N SCALE IN COLORADO



6064 West 55th Avenue, Arvada, Colorado 80002

Open Tuesday thru Saturday - Check our website for hours

Over 150 Product Lines in Stock



www.nscalsupply.com

Recycle your Old Trains



We Buy & Sell Engines, Passenger, Rolling Stock, Vehicles, Structures, Track - anything N Scale

sales@nscalsupply.com

Image 16. Change the Headlights from yellow to white. Kato used a yellow LED on the Headlight; if I recall correctly white LEDs were just coming on the market at the time the models were released. But as I was going through the rebuild I decided I might as well change them to white LEDs.

I prefer Sunny White for Diesel Locomotives and Golden White for Steam, but both are a vast improvement over the yellow ones. Kato includes a tiny board for the headlights; I noted the orientation of the LED so I could install the new ones correctly.

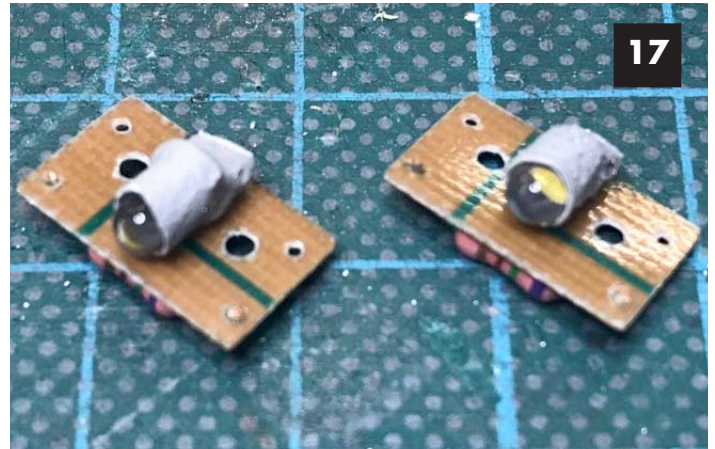
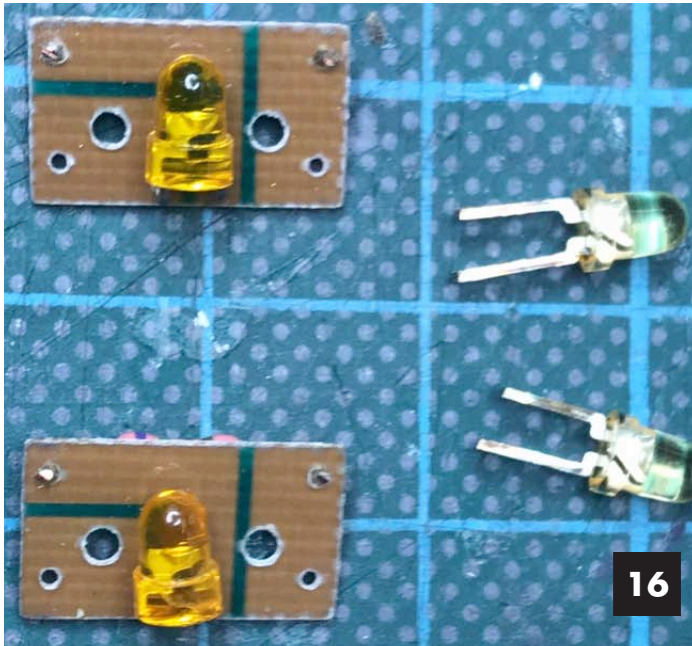


Image 17. I removed the yellow LED and soldered the white ones in place, insulating their contacts with heat-shrink tubing.

It is also a good idea to put some Kapton tape over the contacts of the resistor to prevent it from shortening on the frame once installed. I hardly ever had an issue there, but lost a few LEDs over time.

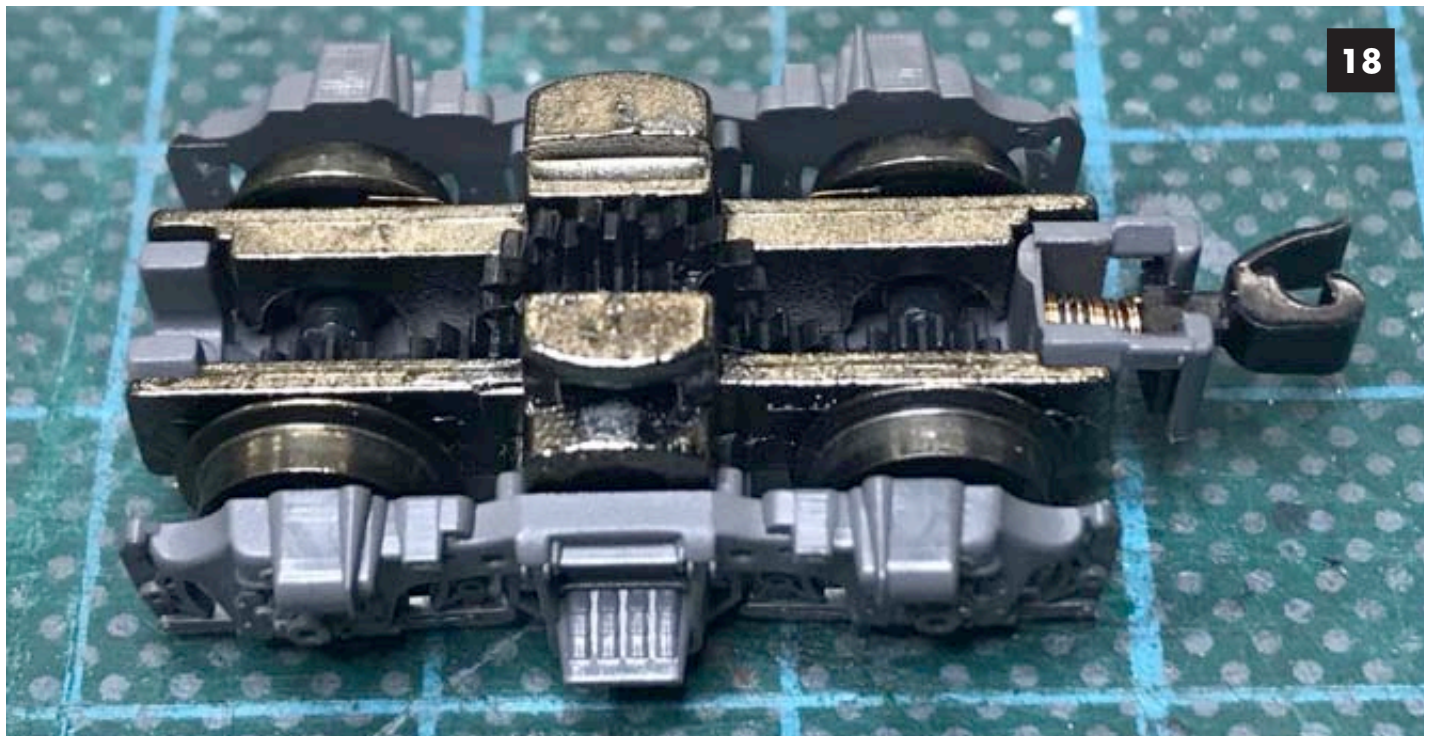


Image 18. I like the look of F-units being close together; these engines will always operate together as A-B-A unit, so there is no need for an automatic coupler between units.

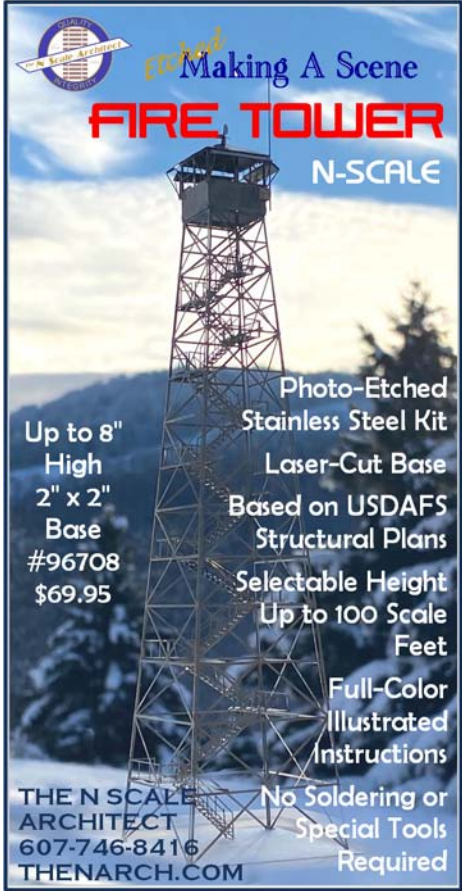
On all truck-mounted couplers I installed Fox Valley Models short-shank Unimate couplers, #51000. I used a sprue cutter to shorten the pin that holds the spring in the coupler box a tiny bit. That makes it easier to install the spring. I also left a little bit of sprue on the back-plate of the coupler to center the spring

For the front I opted for MicroTrains couplers. As the nose contour of the Intermountain is different the Kato coupler clip will no longer work. To get a mounting surface I filed a 1.5mm styrene pad to match the nose. I glued it to one side of the frame and drilled a hole for a coupler screw. 1.5mm allows the pad to sit between the frame and the truck without interfering with the trucks motion and is also the perfect height to line up with the pilot.

Unique Details for your layout
CONTACT
www.SidScuplts.com
 3D Custom printed N Scale items
 without the high prices.
 Ready to go items...
 -Track Bumper
 -Street Light Poles
 -Large Block Walls
 -Concrete Plant
 -Airplane C182RG
All products come ready to paint,
 >no dipping in Bestine to solidify
 >printed in resin for durability
 >high detail level, look at those rivets!



FIFER HOBBY SUPPLY
 Your Local Internet N Scale Hobby Shop
www.fiferhobby.com
SUPER SERVICE
AND
FAIR PRICES
 Actual Shipping
 We Ship International



MAKING A SCENE
FIRE TOWER
N-SCALE

Up to 8"
 High
 2" x 2"
 Base
 #96708
 \$69.95

Photo-Etched
 Stainless Steel Kit
 Laser-Cut Base
 Based on USDAFS
 Structural Plans
 Selectable Height
 Up to 100 Scale
 Feet
 Full-Color
 Illustrated
 Instructions

THE N SCALE
 ARCHITECT
 607-746-8416
 THENARCH.COM

No Soldering or
 Special Tools
 Required

When trackside is roadside....



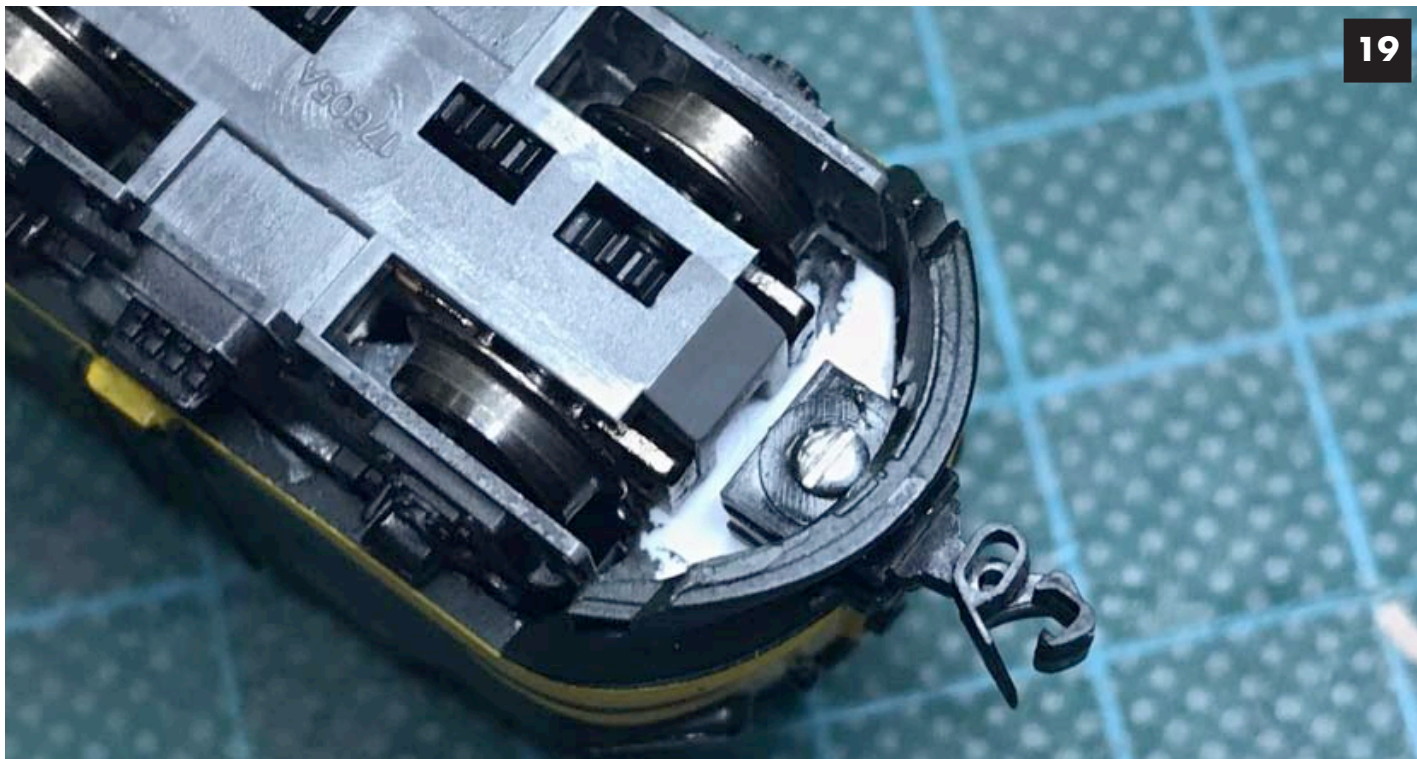
HO/N Sunset Motel
 HO/N Tourist Trap
 HO/N Clark Oil
 HO/N Drive-In Theatre
 Hudson Oil
 HO/N

- ☑ 25+ years of N scale products.
- ☑ Laser-cut Structures & Bridges.
- ☑ Advertising & Storefront Signs.
- ☑ Highway Signs, vintage & modern.
- ☑ New Detail Items.
- ☑ Laser-cut Grade Crossings.
- ☑ Billboards, roadside & rooftop.
- ☑ Laser-cut Graffiti Decals
- ☑ 1000's of satisfied customers.

See your dealer or our website.
Blair Line LLC
 Dept. NSR
 PO Box 1136 Carthage, MO 64836
www.blairline.com

**BACK ISSUES OF
 CLASSIC PRINT
 N SCALE RAILROADING
 ISSUES 001-117
 ARE STILL AVAILABLE AT
 NSCALERAILROADN.COM**

**THANKS FOR SUPPORTING
 THOSE WHO SUPPORT
 N SCALE RAILROADING**



19

Image 19. I removed the uncoupling pin as no magnetic uncoupling capability is needed. The corners of the styrene pad were visible from the side, so I painted them black.



20

Image 20. Paint the tanks and truck sideframes. My “donor engines” are SP units, so they have grey tanks and truck sideframes. The Northern Pacific painted theirs black, so I had to paint these parts. I used Tamiya PC-5 Black and applied it with an airbrush. The Tamiya PC-series colors are intended for RC Lexan car bodies, so they stay flexible and adhere quite well to the plastic of the truck sideframes. They are water based, so a good cleaning with a mild detergent is a bonus. I did not disassemble the trucks but just masked the wheels and gears before airbrushing them.



Image 21. Reassemble and testing. With all the preparation work done it is time to reassemble the locomotives. Again, please refer to Gordon's article on how best to do this.



Image 22. To get the A-units to sit level after the LEDs are installed I had to remove a little bit material in the middle of the nose.

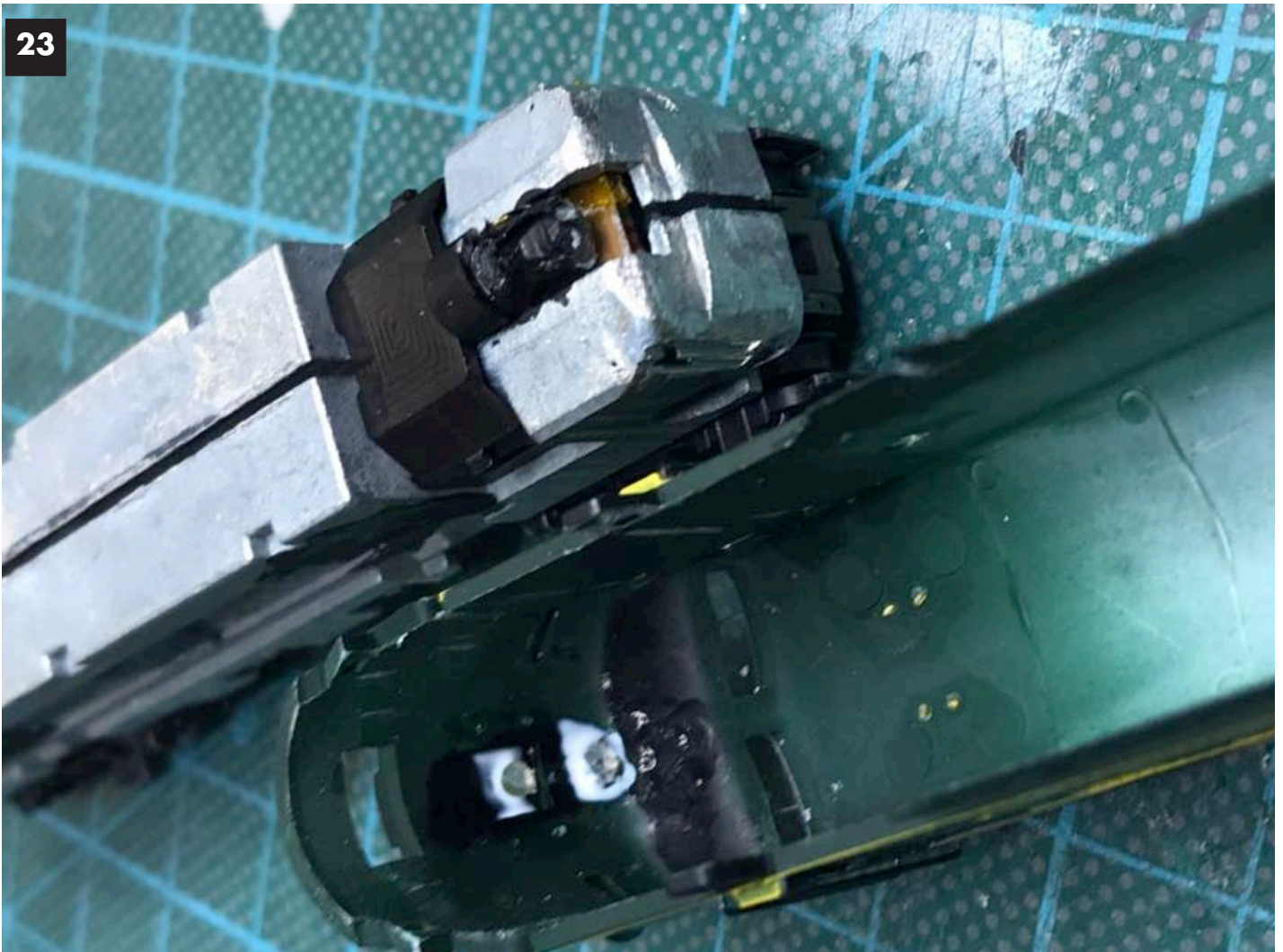


Image 23. I also had to cut the Intermountain light bar into two separate pieces, removing the vertical connector so only the two lenses remain. I fixed them in place with MicroScale Kristal Klear. I painted the inside of the nose and the top of the LED black to reduce light bleeding into the cab. Once the black paint was dry I could press-fit the shells on the frames. The fit is tight enough that I can lift the engines without the frame dropping out, yet loose enough that with a little wiggle on the tank I can slide the shell and remove it.

Conclusion

If your Intermountain F3 develop cracks in the frame or if you want to standardize on Kato mechanisms this is a very doable project. Having access to a milling machine clearly helps, but maybe a friend has one or you can visit a "Maker-Shop" in your area. ▮

Image 24. After #408 arrived in Seattle, the 6501 was coupled to #2, the eastbound *North Coast Limited*, seen here at Lester.



A PFAT PFINGERED PHFRENZY PHROJECT!

MODEL A FOOD TRUCK

by John Corky Whitlock/ Images by Author



I found a good looking dairy delivery truck in my large volume pile of stuff and had an epiphany. This could be converted into a really good model of a totally funky food truck.

Anyone ever tried to hack into one of these tiny beasts? It's really tough metal. I'd be interested in learning how they actually do the casting process, but uncertain as to whether I can gather that information. It's probably a third world trade secret.

An injection molded plastic model would have been a dream for this project, but sadly, not to be.

The first task was to separate the chassis from the body shell. That required drilling out some sort of rivet holding the pieces together. I broke one drill bit, but that was my fault. Did I mention that the model is really tough metal?

I pulled out an assortment of tools to attempt this body / chassis separation. A motor tool as well as an assortment of mini hobby files were a good start. I had to clean the hobby files with wire brushes a couple of times during construction.

I really like my WalMart motor tool. It's cordless, has a fast rechargeable battery, and has built-in led lighting. The best part was a purchase price that won't break the bank.

I drilled out one sidewall of the truck with the motor tool / drill bits and then went to work with the files. This was a slow job. The top of the roof received some mysterious scuff marks so the roof will need to be repainted. Side note: The paint on this model is also pretty tough. Perhaps it is baked on?

After a couple of hours of drilling / filing / cussing I approached a passable opening for the food service window. Note: This project is not going to stand up to close-up photos. This N scale model this size will be viewed from behind a 2' rope barrier rather than trying to pass the electron microscope test.

A piece of strip styrene is cut to fit the window opening as a counter. I thought about modeling what would be the window lift-up hatch, but gave up on that idea. I'll go with one of my striped awnings over that window instead.

The awning idea and awning material I've been using were gleaned from internet searches. I did screen shots of what I found and then pasted the shots into a publishing program. Then I moved my awning material images onto a memory stick that I took to the copy center and I had prints made on their color copier. I did the same with the signage for the model.

Above is a photo of the truck stopping by the Wobegon Electric Railroad shop to peddle sustenance to the workers. ▮

Z21 Novelties 2020

The digital control system for beginners and experts

Roco FLEISCHMANN

AN INTRODUCTION TO THE FLEISCHMANN

Z21

Model train control

PART 1

by Mike Pagano/ Images by Author Unless Noted

I remember the cool automobiles back in the day that started or ended with the letter “Z”. Cars like the Z-28 Camaro and the Datsun 280Z are a few samples that bring back fond memories of my younger days but what about today’s Z21 DCC system by Roco/Fleischmann? Well if you never hear of this DCC system, you might want to stick around for a test ride.

Early digital command control systems started to be commercially available since the 1980s. By 1993, the NMRA settled on one standard, which forced all DCC manufactures to design their system around the Lenz protocol. So what’s so special about this brand of a DCC system? Well, lets take look at the Z21 Start and give it a quick test ride.

Starting up the Z21 Start System and WIFI

My Fleischmann DCC starter set # 931894 came packaged together with a Z21 Start, Class 340 locomotive with three cars, an N Scale track to make an oval with one switch for a siding, and a MutiMAUS tethered controller. This Z21 system is perfect for any small to medium size layout and is comparable to other DCC starter systems that are expandable. The stand-a-lone Z21 Start is rated at 3 amps, which can be expanded with other Z21 boosters (and other devices) to supply additional power as the layout grows. The Z21 system can be purchased separately with a WIFI package as well. The Z21 uses a LAN (local Area Network) port connection that conveniently connects to a WIFI router sold by Roco. The Z21 Start is designed to work with their Z21 WLAN Package. It’s a router with a special configured IP address that is designed to unlock the interface of the Z21 Start. The instructions are easy to follow and a video of the procedure is very intuitive.

Visit: www.Z21.eu/en/products/Z21start-unlock-code

You will need a PC computer to unlock the system but once this step is completed, your system will update its firmware by uploading the Z21 Updater App from any smart phone. Once you have the system up and running with the router and a Z21 throttle controller App loaded to you your smart phone, the fun of a test drive starts with operating your locomotive. There is more to discover that just operating your locomotive from your smart phone with the Z21 system. We’ll discuss other accessories as it pertains to the Z21 system and WLAN package system in later issues of NSR, so say tuned and enjoy the test rides!

Image 01. The z21 Start digital set is the new DCC system that Fleischmann is offering to new comers in the hobby. The Z21 Start is also offered separately by Roco.





Image 02. The Z21 WLAN package is sold separately and it is designed to be a plug and play once the unlocking feature is implemented to any Z21 system.

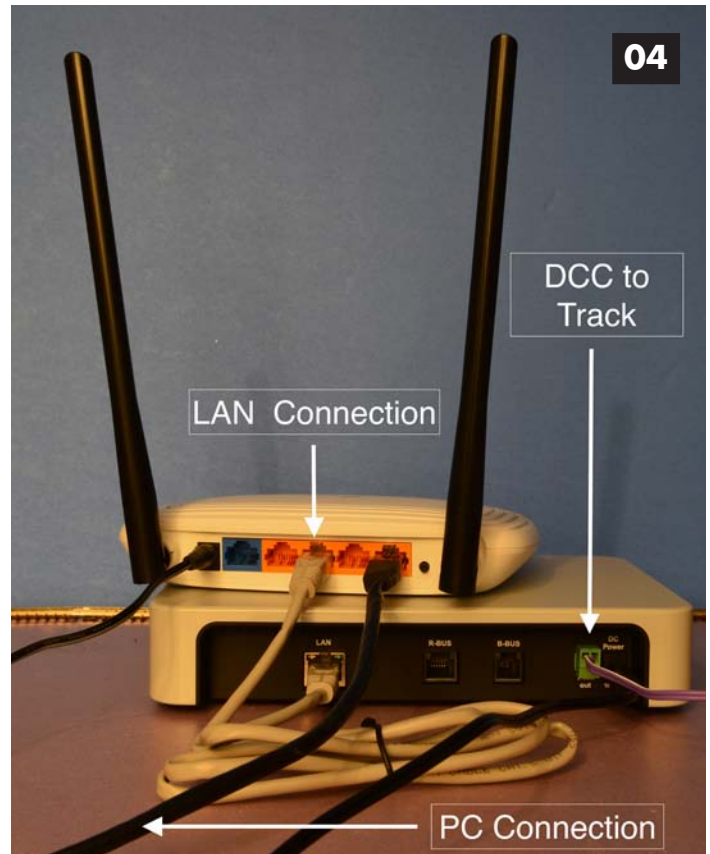


Image 04. The back of the command station and the router is where all of the connections take place. The black LAN connection (lower left) is temporarily connected directly to a computer, which was previously connected to the Internet to download the Z21 maintenance files to unlock the system.



Image 03. The Z21 Start Set p/n 931894 includes everything to run a train and start learning the Z21 system with a tethered MultiMAUS.



Contact your North America Roco/ Fleischmann Dealer for the availability of the Z21 system and any other Roco/Fleischmann products.

Heartland Hobby Wholesale
6929 Seward Avenue
Lincoln, NE 68507
USA
www.hhwonline.com

Euro Rail Hobbies
9901 Main Street
Summerland, BC V0H1Z0
Canada
www.eurorailhobbies.com
1-866-799-6098

Image 05. The power supply to the Z21 and WLAN package is sold for a EU style receptacle connection. Don't be discouraged with this setup because all the Roco power supplies are designed as a switching power supply rather than a traditional step down transformer. I purchased a couple of EU to US power plug converters and used them to get my system up and running in North America. The switching power supplies will adjust to supply the proper output voltage with no worries.

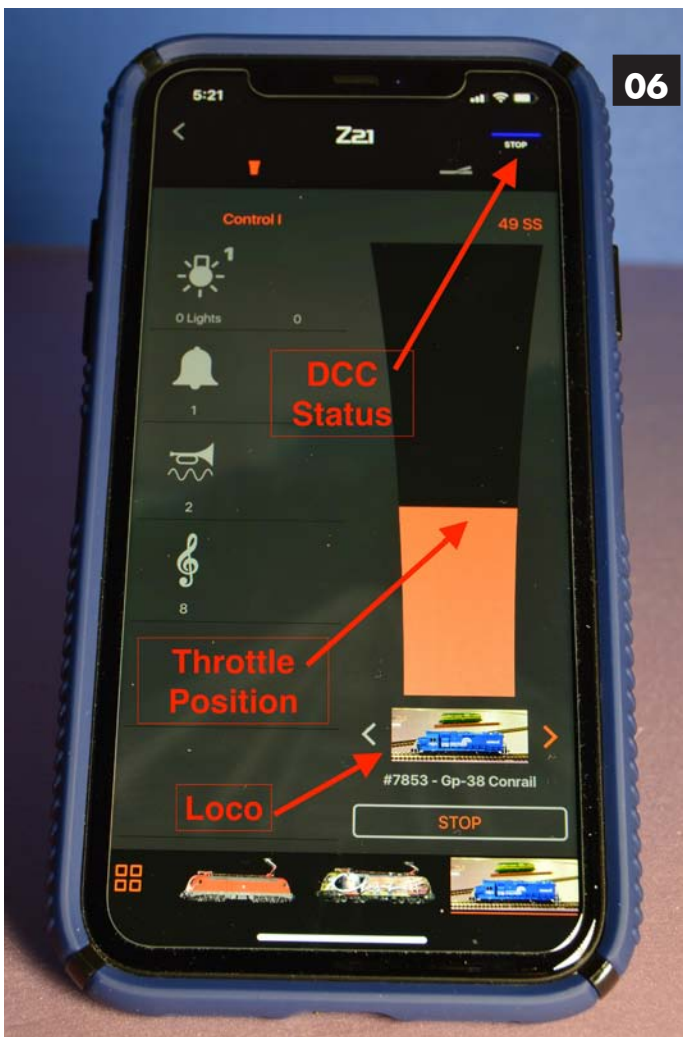


Image 06. Here is a view of a Z21 Throttle App on my iPhone -11 operating in steering mode to control a GP-38 Conrail locomotive file which I customized with a picture of the model and selected the function keys to what I wanted to operate with.

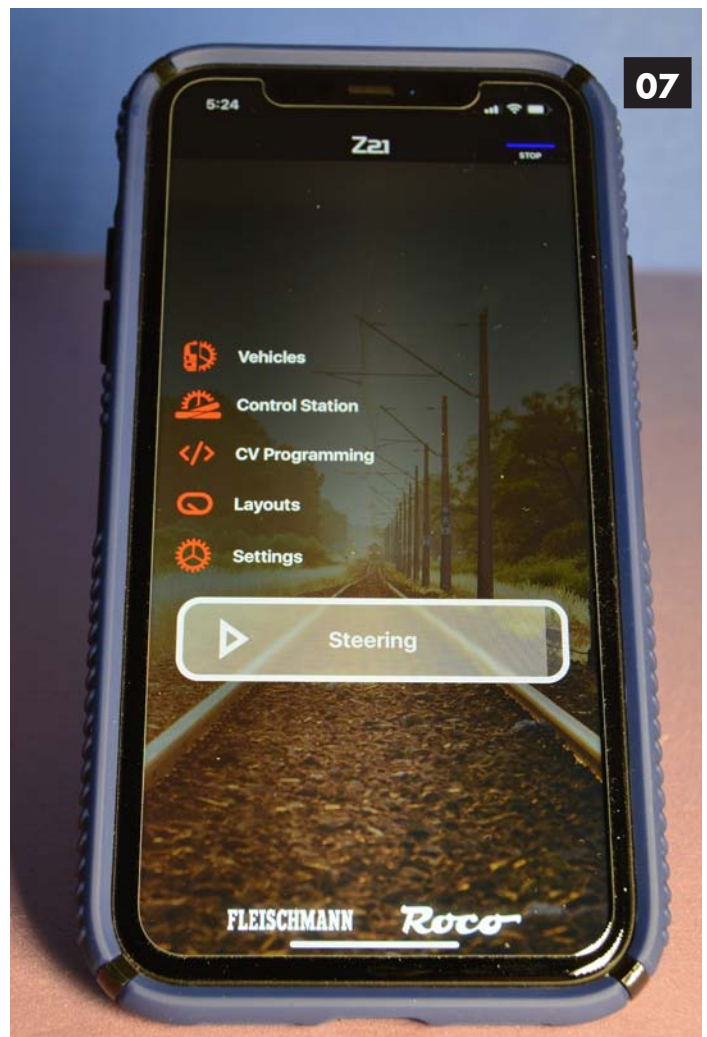


Image 07. The Z21 main menu can be displayed on any smart device through the App store. Down load the App at any time to check it out. ▶

Faux-Impressionistic

PASSENGER CAR INTERIORS

by Kirk Reddie/ Photos by Author



“I may not know art, but I know what I like.”

The above quote is the final punch line of one of my favorite Monty Python quotes. I suspect it is true among most model railroaders. If one chooses to not be bound by conventional boundaries, we still live in a world of scarcity and choosing to do something limits other choices. But we can prioritize on things we like.

In many ways commercial art can be more interesting than normal art. A client hires an artist to communicate to his customers. Why not hire a photographer? The above photo is from a brochure the Milwaukee Road issued to sell the idea of the upcoming *Olympian Hiawatha*. (Cover on right.) It is hard for a photographer to portray the interior as being 20' wide so the woman on the lower right can keep her distance from the little creepy guy on the lower left. Or light up the greenery outside the car. And it is really hard for a photographer to capture the essence of something that doesn't exist yet. The last two cars in the train were delayed for ~18 months but they wanted to sell tickets before that time.

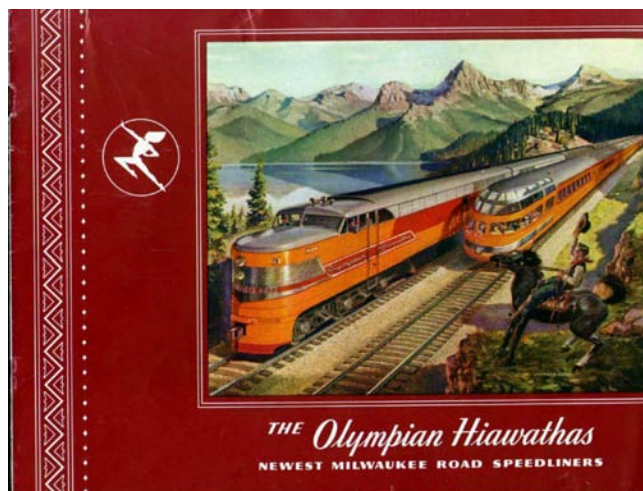
I would guess that rote miniaturization is a craft

rather than an art. Mixing the two is probably the best route for most of us. Should be model things we can't see?

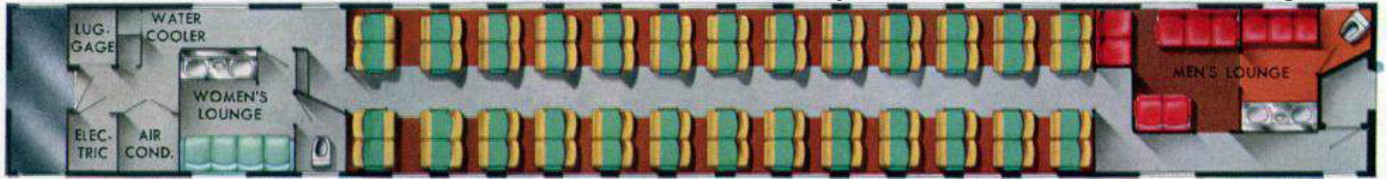
The first step is to find if the information exists. This booklet shows interiors. See the next page.

But are these images accurate? They must have been based on expectations. But they may not be any more accurate than the above image. Long ago I heard the concept of leaving off details we cannot see but sometimes exag-

gerating some of the details one can barely see. A corollary might be to do what one thinks looks right rather than killing oneself to do something that might be accurate but looks wrong. The first step is to find what reality was.



These interiors are from the brochure. I do not know if they were accurate or for how long.



Each OLYMPIAN HIAWATHA coach seats 52 in the body of the car. Air conditioning is of an advanced type, and there is an electric water cooler.

ABOVE. The scheme planned for the coaches. I do know in later years the seats were dark brown.

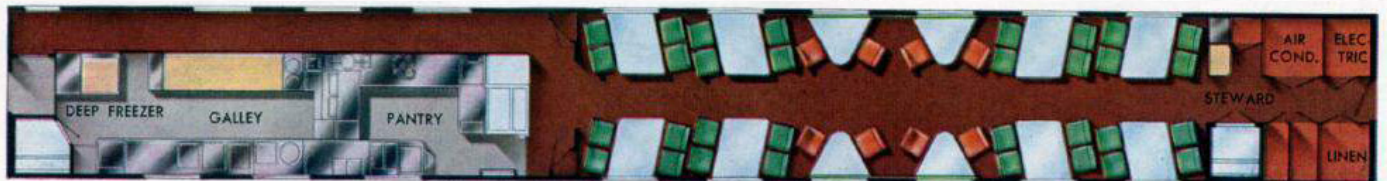


The cocktail section has six booths seating twenty-four. Nine tables seating eighteen in the restaurant end amplify the facilities of the dining car.

ABOVE. The Tap (Grill) car that the Super Dome bumped to the Columbian. Kato did not do this car. I am hoping to have 3D printed versions soon.



Varied color schemes, wide windows and the use of attractive wood veneer, plastic and painted surfaces lend added charm to the Touralux sleeping cars.



Not a little of the charm of the dining car is due to the unusual table and seating arrangements that are illustrated in this floor plan.

ABOVE. The diner in the brochure is configured with 40 seats with staggered table.

BELOW. The Kato model has a later version with a more conventional 48 seats.



This all-room sleeping car contains ten roomettes and six double bedrooms. Bedrooms connect to form suites if desired.



The Sky Top Lounge car includes eight double bedrooms, each with electric outlet, circulating ice water and individual air conditioning and lighting.

ABOVE. The first year and a half the Oly Hi had a heavyweight 3-2 open air observation like the Micro-Trains 3-2 observation car.

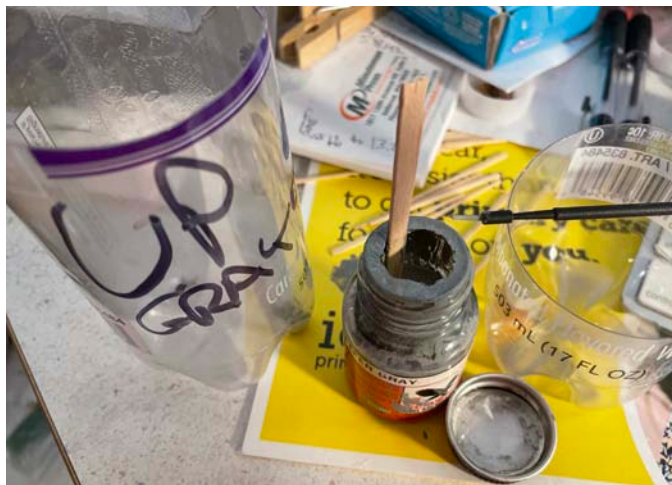
An advantage of doing a freelance train is you can make stuff up. But even then one should have standards. Ron Johns painted up a Kato *California Zephyr* set for me in Norther Pacific Loewy Green as a tribute to the American Flyer train set... Including PAs numbered for the AF PAs.

I think I'd seen a real parlor car with bright red seats and I wanted simulated white head- and arm rests. I did a practice car and was amazed how well the interior showed through, even at a distance. So I painted the visible seats red with white trim.



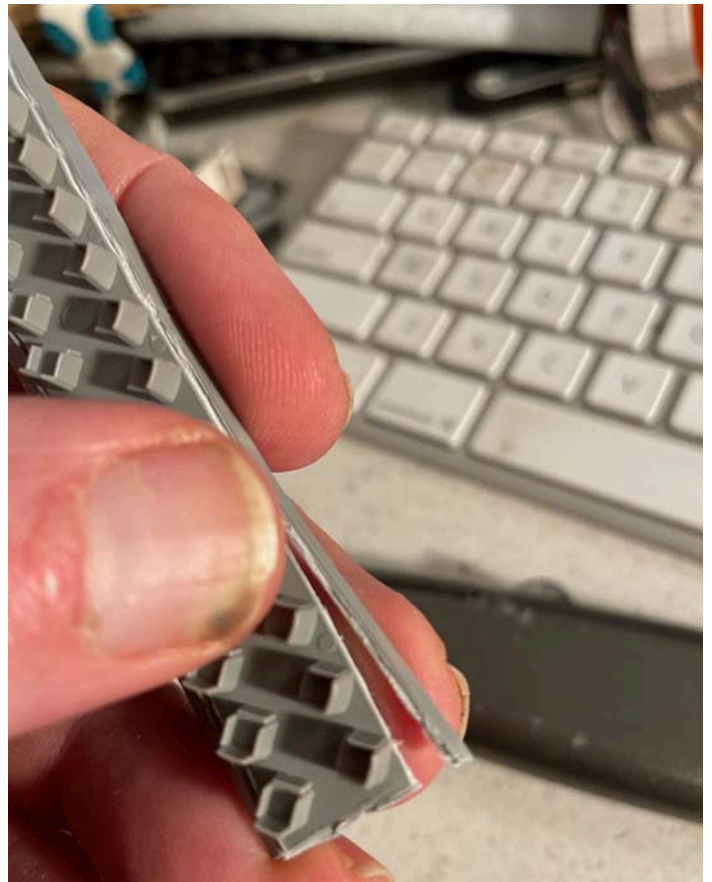
Removing the shells from Kato UP cars is easy but recently I realized it is a lot easier to reassemble if you put the car upside down in a foam cradle. When it is time to put the chassis back in, hopefully the clear windows are still in place. If not: Press fit and the car's interior will hold the window material in place.

My favorite paint Polly Scale is no longer available. But for interiors one doesn't need to have railroad colors. I keep each color in its own cup with its own microbrush and stirrer. When brushing seats I keep the stirrer in the bottle and rub the brush onto the stirrer to keep the paint at full strength.



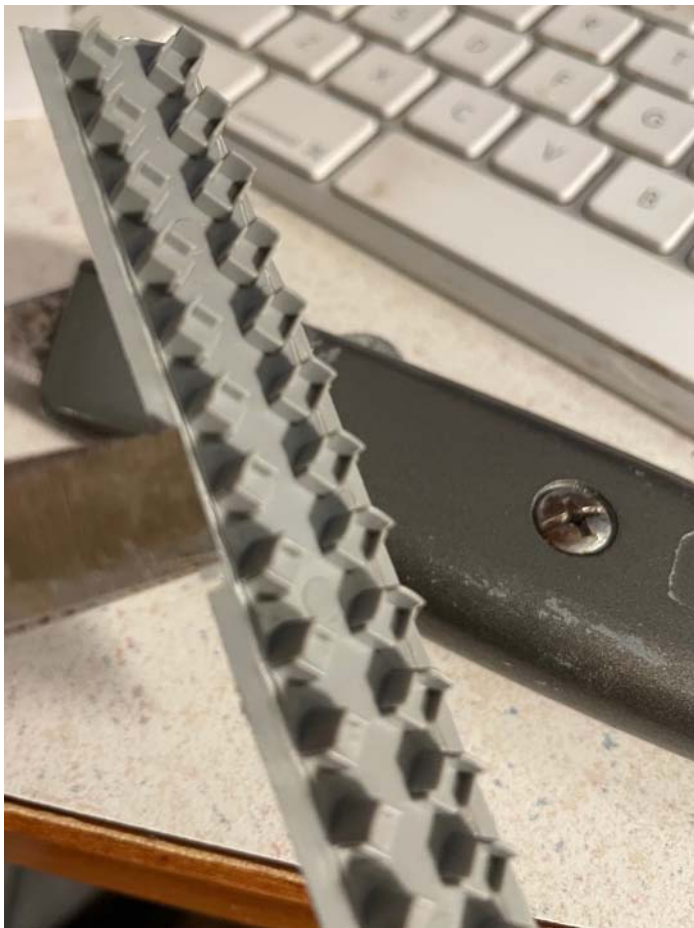
One of the trains I want to model is UP 457/458, their main Seattle Portland pool train in ~1950. When they updated ot with the former *Train of Tomorrow* equipment, they also added 6 1937 coaches (5300-5327 series). My stand-ins are Kato's 5400 series.

These seats on Kato cars are easy to paint. I used caboose red with antique white for the head and arm rests.



#457/458 needed a flat top parlor car. The UP took a 5200 series 1937 coach and converted it into a parlor car #997. I started with a Kato 5400 car and put in an MTL parlor interior.

Being a plastic casting, it is easy to remove the edge.



To reduce the chance of blocking the shell, I scored the outside of the chairs. One can't see the edge of the floor near the walls anyway. I used a flat nosed pliers to snap off the edge of the casting.

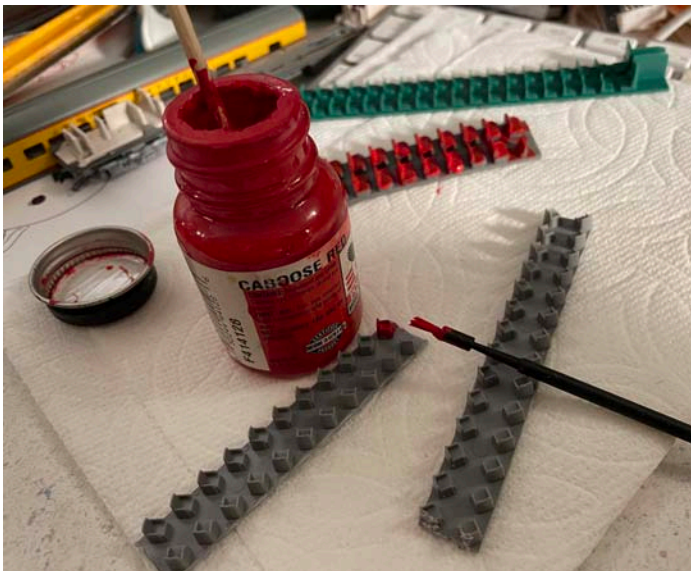
I test fit the seats I fit them into a Rivarossi roof.



I also test fit the thinned parlor seat section over the coach floor.



I never liked the Atlas razor saw for cutting track but find it far superior than more expensive saws to work on rolling stock. Here I didn't even have to remove the Kato interior. I just sawed two cuts and the coach seats came out and are available for another project. The parlor seats are thinner but the gaps can't be seen through the windows.



I like Caboose Red for coach seats. I suspect the color is wrong but it looks good. It is important to throw a lot of paint on it and with gray and darker interiors it usually takes two coats.



I seem to have to put a second coat of white on the head rests, I put a very thin line and it seems to look good from the outside. As 457/458 were daylight trains most of the year I will probably not light them. Of course maybe they should be lit during those times of the year that features weather for some that is soul crushing dark gray drizzle...

I used Aleene's Original Tacky Glue (as endorsed by celebrity Kim Saign) and use clothespins to clamp the interior to the base.



I chose to not detail or paint the heads or lounge areas. But I think adding and painting parlor seats is worthwhile for the few who might realize what the car is.



Can the parlor seats be seen without interior lights? Maybe if we take a lot of pictures while holding it next to a light.



Next I wanted to simply paint the interior of an off the shelf MTL heavyweight. This is a special run from RailSmith. The roof is easily removed. The key for MTL heavyweight interiors are the interior bulkheads on each end. They are the plastic looking orange pieces. They hold the windows against the walls.

An interesting feature to me is the scale size lettering above the windows that is very hard to read. Upper right: I commissioned RailGraphics and used an incorrect "Times" font and space bar. At ~11" tall they are twice scale.



The interior is dark brown. I decided to paint the floor light gray.



This didn't have as much impact as I had hoped. But it doesn't hurt!



The seats should probably be medium green but I stayed with bright red. I left the partitions brown and skipped the headrests



From this angle and light the interior can't be seen but I think in a moving train it is good to have these changes. I also painted the truck frames and underbody details boxcar red.



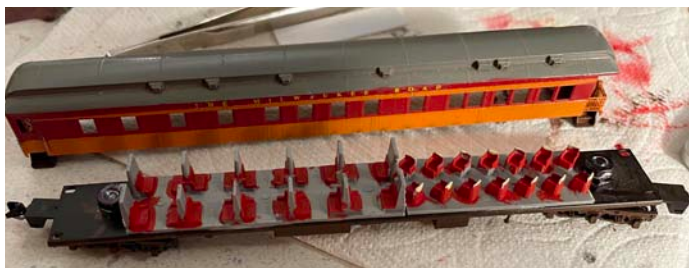
During the 1990s I painted up some brass cars to experiment with spray cans with a creamy orange and darker gray than I usually used. Since that time Micro-Trains has come out with interiors, it was going to be a lot easier to represent interiors. The above are two Pecos River Brass imports that are probably Santa Fe prototypes but similar to cars that ran on the Milwaukee Road. The 6-6 ran from the late 1930s on the *Olympian*, then on the *Olympian Hiawatha* until it was sent to the secondary *Columbian*. I couldn't figure out the windows on what I thought was the *Columbian's* 10-Section Lounge Observation... but after I did the interior I discovered that I had painted up one of my PRB 3-2 observations, which in the mean time was offered by Micro-Trains.



First I used an Atlas razor saw to cut up a Micro-Trains 12-1 interior to get 10 sections (center). I replaced the trucks with MTL 1018s.



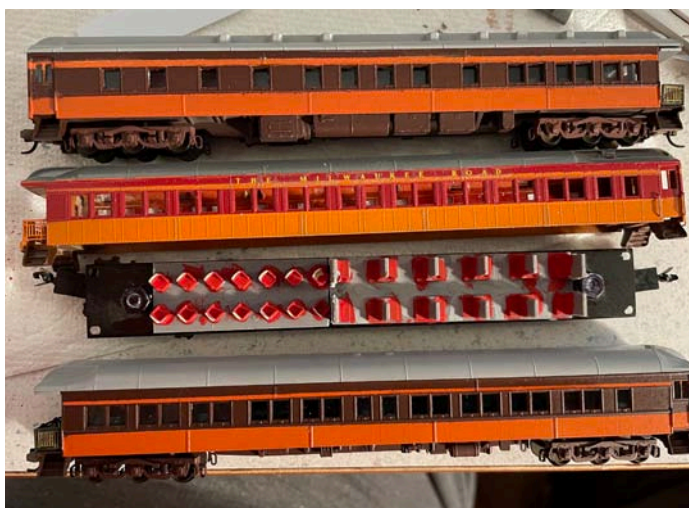
The lounge should have plush chairs against the walls... but I decided to cheat and use parlor seats.



I painted the interior similar to how I painted UP 997 and the RailSmith 12-1.



I still like the car but the interior will be put under a PRB 10-Section Lounge Obs shell.



The top and bottom cars are MTL 3-2 Obs painted by Dick Volkman. They represent the way they were painted in the 1947 *Oly Hi* scheme with light gray roofs, which Dick hates. At some point the gray seems to have gotten darker before they went to black roofs in 1950.



I decided the key to the 6-6 sleeper was to make sure the 6 sections line up with the windows. Glue them in first to line them up. The MTL 12-1s and 10-1-2s seem to be the most common cars but variations are nice.



The sections are “open” so one can see window to window. But the bedrooms are enclosed and unless there are lights on, it is unlikely that any interior is needed... other than a view block. One would never see through the car here unless the door was open and the light was right. I started with two pieces of styrene and cut a notch for the bolster pin.



I was concerned that the styrene wouldn't hold so I Aleened-in a piece of wood. It has held up well.



I couldn't find my Grimy Black so I painted the scenic block Boxcar Red.





These are so cool I used the picture twice. I needed a sanding block and Bill Weed made these for me with 80, 120, 220, and 320 grit. He marked them so they can be re-papered when needed.



With resin interiors, one needs to sand the bottom to make them flat. These Fine N Scale seats look good in the NJI “*Hiawatha of 1939*” brass cars. I painted them at the same time I painted the PRB sleepers. I didn’t like the performance of the factory trucks and several other attempts



until I put Kato trucks with couplers. The brass cars have plates for body mounted couplers that have to be removed. The NJI plates pop right off by slipping in a chisel. I haven’t figured out how to safely remove these on the PRB cars yet. These cars run great now.



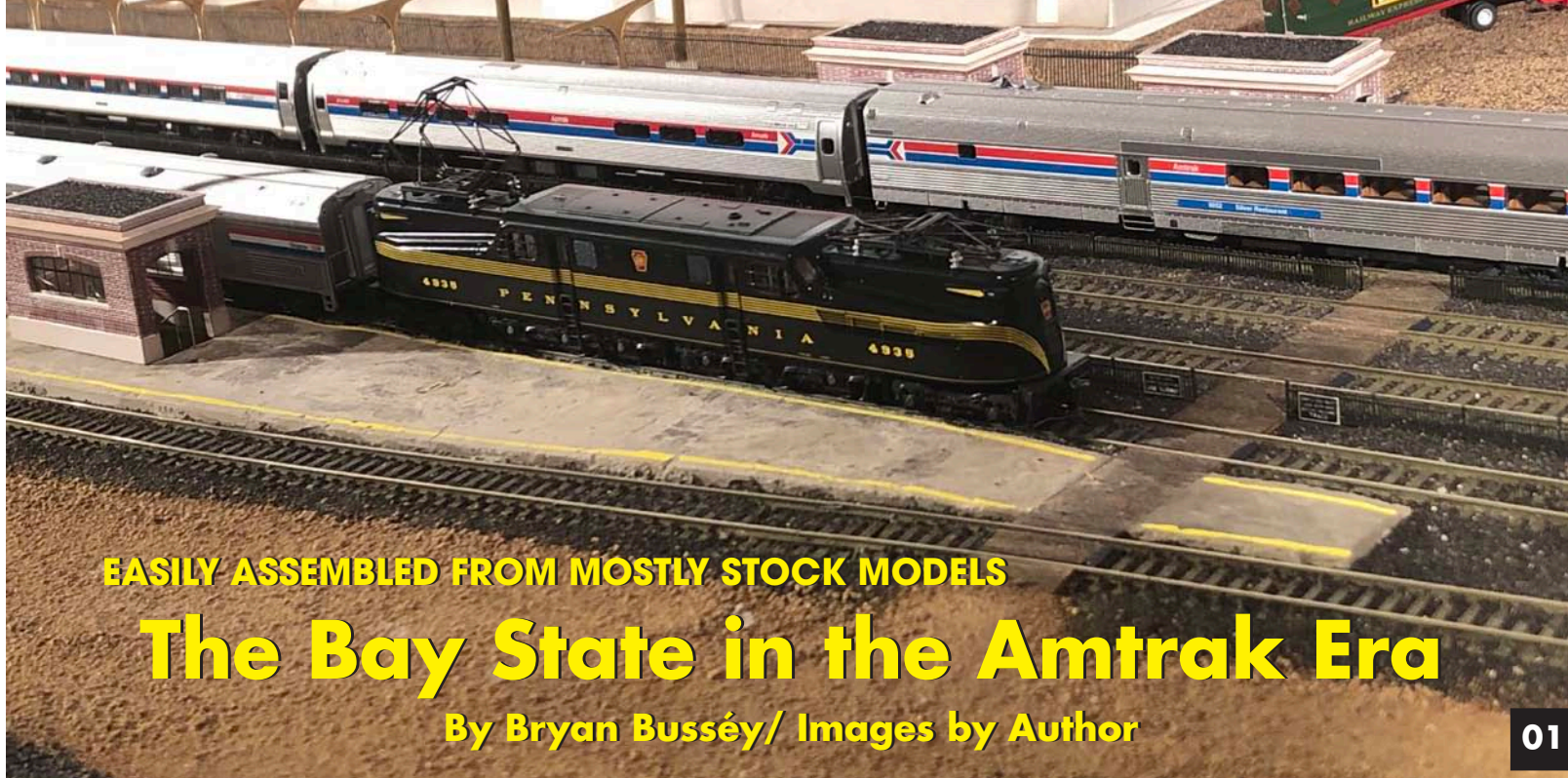
After the *Olympian Hiawatha* was inaugurated, most of the old *Olympian* equipment and schedule became the *Columbian*. The NJI set included a diner, which did serve on this train. MTL diner’s interior can be cut down to fit. The key is to line up the last pair of tables to the last window. The kitchen area provides the necessary scenic block. There are still a lot of old brass cars that can benefit from MTL interiors.



I reluctantly decided I needed to add “glass” to match the great plastic passenger cars. I used scissors to cut Qtip packaging into strips I glued to the inside walls with Aleenes glue. My results are still “mixed” but improved.



With the 8 MILW cars mentioned here: add a stock MTL express car, FVM express car, and FVM Dorm/Coach: A *Columbian* takes shape. ▀



EASILY ASSEMBLED FROM MOSTLY STOCK MODELS

The Bay State in the Amtrak Era

By Bryan Busséy/ Images by Author

01

Image 01. On a cool day in October 1980, Amtrak's eastbound Bay State pulls into New Haven Union Station behind the heritage Blackjack GG1 decorated in Pennsylvania's vintage Brunswick green five-stripe scheme (Kato stock).

Many of my Amtrak era consists are easily assembled utilizing stock models. A number of models faithful to the prototype are offered by numerous manufacturers, making it fairly easy to run accurate consists, whether from the "rainbow era" or with equipment decorated in various Amtrak schemes. The following consist is one of six that I've assembled from a variety of models. The "heritage" cars more often than not have been

modified, but the Amfleet and head end equipment is off the store shelf. Since the "heritage" models themselves are prototypical models, most of the modifications consist of removing skirts, adding stirrups and safety gates, capping antenna mounts, updating the diaphragms, painting details and various other tasks to represent the prototypes as they appeared in the 1980s.



02

Image 02. The G disconnects from the consist as the electrified portion of the journey has ended.



Image 03. After the electric clears the path, a pair of F40PH units (Kato stock) approaches the consist to continue toward Boston.



Image 04. The Budd-built baggage #1206 (Kato stock) is the first car in the consist.



Image 05. Amfleet II coaches 25023 and 25056 (Kato stock) follow. (The subway entrances are the best representation I can remember seeing and Bryan is considering writing an article on how he did these. -Editor)



Image 06. Amfleet I coach #21116 (Kato stock), still in Phase I deco, is the fourth car.



Image 07. Amfleet II lounge #28015 (Kato stock) is where the passengers can go to stretch their legs.



Image 08. Diner #8096 (Kato kitbashed) is a former Union Pacific car that has remained in service.



09

Image 09. Sleeper #2750 (Kato kitbashed), a former Santa Fe car, carries the rear markers.



10

Image 10. The F40PH diesels connect to the consist.



Image 11. The consist continues its journey to Boston. ▶

As stated above, all but two of the cars in the consist are stock items, most of which remain available today. The baggage car #1206 is from the Amtrak Phase III Superliner two-car add-on set released in 2010 that also contained a step-down coach. The first two Amfleet coaches #25023 and #25056 are the two-car Amfleet II Phase III Set-A item released in 2012. The third coach #21116 is from the Amfleet I Phase I four-car set released in 2016. And the Amfleet II Café #28015 is from the two-car Amfleet II Phase III Set-B item also released in 2012. Diner 8096 started as an undecorated model. Since it is based on a Union Pacific prototype, it was modified to match one of the cars as it appeared in 1980. The antenna was removed from the roof and embroidery micro pins were inserted in the holes to represent capped mounting points. The body was painted Amtrak aluminum mist. Holes were drilled along the bottom edge of the sides and Gold Medal Models etched stainless steel passenger car stirrups were added at the corners and under the service doors. .008" wire was added across the service door windows and painted black. The window frames were painted black, and the appropriate kitchen and pantry windows were painted white. The indents in the tall roof vents and the flat vents were painted black to imply depth. Union Pacific Excursion Train diaphragms replaced the stock diaphragms. Microscale "Phase I" decals finished the appearance. The stock Amtrak scheme that Kato offered as part of a six-car boxed set back in the 1990s was not accurate for the prototype, and it was easier to start with an undecorated model than try to modify the decoration on the stock model. Sleeper "Palm Arch" required far less work than the diner. It was a member of the Amtrak Phase I four-car set released in 2011. While the decorative scheme was accurate for 1980, the body was still in its original Santa Fe "Super Chief" 1950s configuration. There are photos of the real Palm Arch in service in the 1980s, which made it easier to match the model to the prototype. The bottom skirts were removed to match the real car, carefully so as to not disturb the finish or the markings. The hallway handrail embossed on the inside of the window glass was painted silver. As with the diner, the mid-century diaphragms were replaced with Excursion Train diaphragms. A Rapido etched safety gate was added to the vestibule end of the car.



Image 12. The Bay State as it arrives in New Haven. ▶

N HORIZONS

Bluford Shops. The latest announcement is 13 new paint schemes on their various bay window cabooses. Road names include Conrail Shared Assets, New York Central in a special safety paint scheme, Nashville Chattanooga & St. Louis, Southern, Chicago & Eastern Illinois, Louisville & Nashville, Rock Island, Norfolk & Western, Chicago & North Western, Burling-

ton Northern, Soo Line, and Southern Pacific. One that doesn't appear in their ad in this issue is a Burlington Northern caboose that was actually painted 11 years into the BNSF era. BNSF uses it today as a shoving platform.



Kato USA. 2021 AUG should see a new release of F7 AB sets in Baltimore & Ohio, Milwaukee Road (Silver Wings), Southern Pacific (Black Widwo), and Union Pacific. September should see the release of the same locomotives with DCC (Digitrax) as well for special ordered ESU sound and DCC.

Digitrax. The Digitrax Evolution Express Advanced Starter Set

This set comes with everything new users need to get started with an Advanced System. The system comes in both Standard Tethered and Duplex Radio. The main system components are the DCS210+ Advanced Command Station, DT602 series Advanced Super Throttle, either a UP5 or UR93, and a PS615 power supply. With all these components one can be ready to run right out of the box.

The DCS210+ is an Advanced Command Station/Booster. It can run up to 100 locomotives and 100 throttles. The DCS210+ is complete with USB Interface, full read/write programming, Loco Reset and EZ routes buttons, and also a separate programming output so one can run and program at the same time.

The UR93 has more than double the radio range of UR92 Duplex units. It supports combinations of DT602D/DE and DT500D, DT400D and UT4D Duplex Radio throttles.

The DT602 series Advanced super throttle gives operators direct control of two locos at a time with all the powerful features and flexibility serious model railroaders demand. The DT602 series is designed to handle nearly every aspect of layout control.

With a brand-new Color 2.4" LCD Screen one can run trains and consist, control up to 29 functions such as sound, program decoders, set up and operate routes, and much more. With, a soft On/Off Switch and advanced power savings you can operate longer than ever.

NRail™

Expanding our horizons...

NTRAK  **T-TRAK**



Membership \$10 per year:

- Six issues of the Newsletter
- Full access to the website
- Discounts at the NRail store
- Support of N Scale
- Sponsorship of N layouts

Visit our website at nrail.org for more information and click on "Join us"!

NRAIL.ORG

THANKS
FOR SUPPORTING
THOSE WHO SUPPORT
N SCALE
RAILROADING

TRAVEL GUIDE N EVENTS

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.
Postponed to 2023.

Expected:

2022 JUN ??-?? TN Nashville.
28th Annual National N Scale Convention

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

OBSERVATIONS

Thoughts by Kirk Reddie

Sometimes the Tracks to Success Are Not Tangent

I heard a lot of good and bad things about 3D printing but working on a layout has kept me away from working on rolling stock. Like everyone else, I have many life times of projects. Some of those mentioned on pages 27-34 are over 20 years old.

I am close to getting my UP 457/458 of stand-ins ready. One of the holes is a signature RPO/ Express car with a Harriman roof. I have been running with a MTL UP car that looks great to me but would look better with a Harriman roof. I googled some H0 brass to see what they might look like and found some for \$550.00! A pal tipped me off the roof is on Shapeways. They also have a cluster of round and rectangular vents.

One has to soak these in Bestine overnight and I didn't have any idea where one bought Bestine. Another pal claimed he had a duplicate can he sent to me. I love charity!



I poured some Bestine into a glass jar and placed on end to soak the printed parts overnight. The clear parts turned white. I washed them and let them dry.



At first I thought this was a good friction fit. But eventually I realized I had to sand off the lip on one side to get the roof to fit, and over time I would probably have to glue the roof to the MTL car permanently. But for now I am glad that I haven't done that yet.



I like to use an awl to start a drill hole and suddenly I had a big hole in the roof. I put some scotch tape underneath and used toothpicks to apply layers of Aleene's Tacky Glue. So I would switch from round to rectangular vents. The cluster is to the right of the glue bottle above. But these parts were tiny and I didn't my optivisors available, so I just strips of .020 x .080 styrene to see how it looked. I will make a template for future vents. I don't have a paint booth yet so I hand brushed 2 coats of medium gray.



This is not a very good model yet but it is a step forward to an acceptable model. ▶

SEE YOU NEXT ISSUE!