

# ***THE B&O MODELER***



Number 60

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## AN INVITATION TO JOIN THE B&O RAILROAD HISTORICAL SOCIETY

The Baltimore and Ohio Railroad Historical Society is an independent non-profit educational corporation. The Society's purpose is to foster interest, research, preservation, and the distribution of information concerning the B&O. Its membership is spread throughout the United States and numerous foreign countries, and its scope includes all facets of the B&O's history. Currently the Society has over 1600 registered members.

Members regularly receive a variety of publications offering news, comments, technical information, and in-depth coverage of the B&O and its related companies. Since 1979, the Society has published a quarterly magazine, *The Sentinel*, dedicated to the publication of articles and news items of historical significance. Other Society publications include monographs, calendars, equipment rosters, and reprints of original B&O source material. Their purpose is to make otherwise unobtainable data available to the membership at reasonable cost.

Membership in the Society is a vote of support and makes all the Society's work possible. It provides those interested in the B&O with a legitimate, respected voice in the railroad and historical communities. By working together, B&O fans can accomplish much more than by individual efforts. No matter how diverse your interests or how arcane your specialty, others share your fascination with America's most historic railroad. We invite your participation. Review membership options on the [Society website](#), print and complete the membership information and mail to:

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**ATTN: Membership**

**P. O. Box 1608**

**Sykesville, MD 21784-1608**

*(On the cover: Kennard Wing's EMC SW1 203, fresh out of the paint shop and ready to get to work. See page 23)*

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## FROM THE EDITOR

### DAVID MURVIHILL

Welcome to another issue of the B&O Modeler Magazine. As happened last year, articles were slow in coming during the summer months but enough came during Fall to get this edition out before year's end. I found them to be quite interesting, hopefully you will too.

The 1935 Royal Blue project drags on, first three cars awaiting me to put on decals. My mindless pursuit of Aristo Craft HO continues as well, with a brass 2-6-0 Mogul, originally in kit form. It runs with the boiler off but not with it on. Some things are designed to drive you up the wall...

I'd like to put in a plea for an April Fools article, assuming the next edition will be about then. If you have anything amusing that is B&O related let me know and we'll see what we can do.

And as usual, if any of you have any projects you'd like to share with an admiring group of B&O fans, feel free to contact me and I'll put you in print...

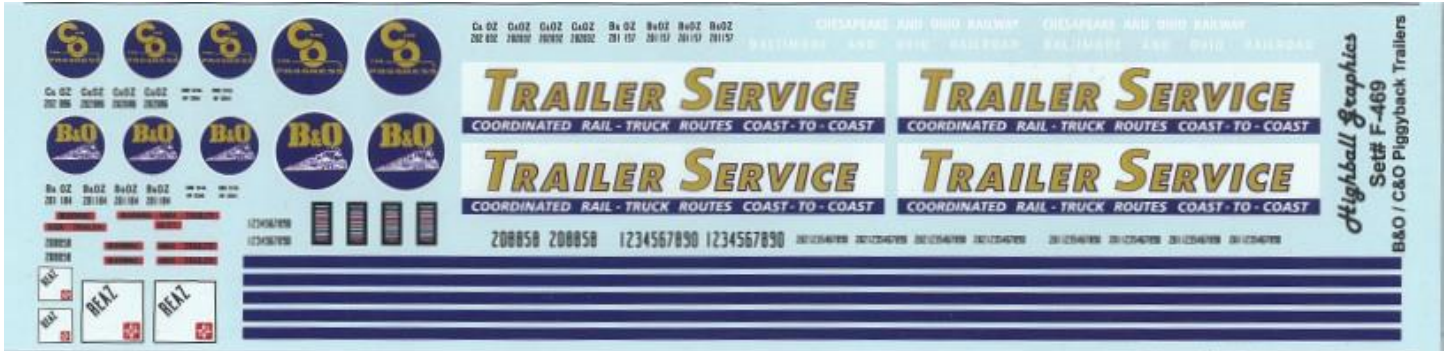
Feel free to contact me via e-mail ([Davidmurvihill@gmail.com](mailto:Davidmurvihill@gmail.com)) or by phone (314-939-9028).



*(My daily inspiration: A string of B&O Heavy freight engines waiting for jobs. The EM-1 never works right...)*

## WHAT IS NEW AND WHAT IS NEWS

- James Rogers reports: “Some modelers might be interested that Highball Graphics has introduced a new set of B&O Trailer Service decals. These are available in HO and N scale. I believe this is the first production of Trailer Service decals since Walthers issued them about 1967.”



(photo by author, presented with permission from Highball Graphics)

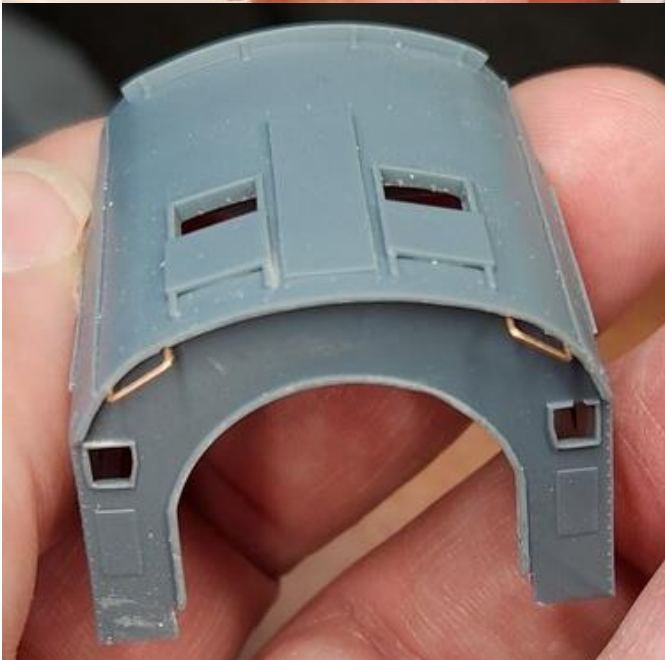
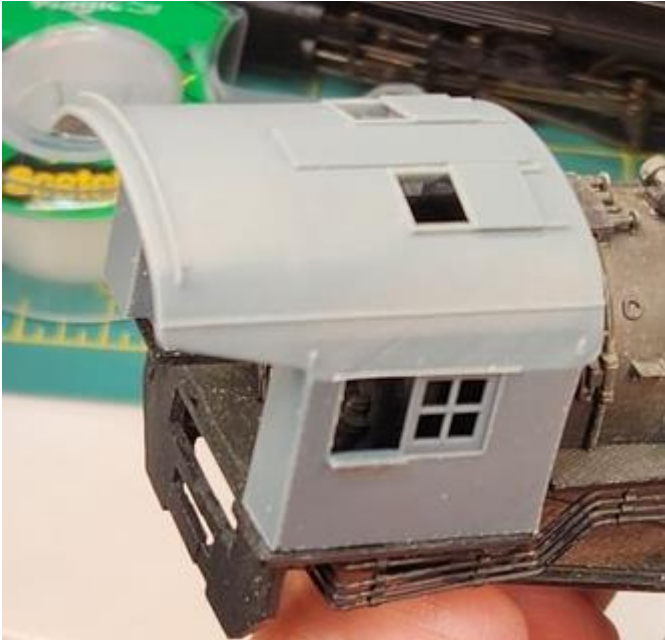
- Tangent Scale Models announces HO scale Greenville Steel Car B&O Class B-93 Quad Plug Door Box Car <https://www.tangentscalemodels.com/product/baltimore-ohio-bo-delivery-1-1970-blue-greenville-86-quad-plug-door-box-car/>. Also, the previous release still available: HO scale Greenville Steel Car B&O Class B-89 Double Plug Door Box Car <https://www.tangentscalemodels.com/product/conrail-quality-1992-era-greenville-86-double-plug-door-box-car/>.
- John Teichmoeller writes regarding Aristo Craft locomotives: “Fred Lass acquired this engine from the estate of David Glover. Fred installed a decoder and brought it over to run a couple spins around my layout, pulling a string of the old Roundhouse passenger cars.”



- Dennis Elliott reports..." I'm forwarding this announcement from Atlas for a B&O M-63 box car in HO scale. As you will see, it's a CAD drawing which is nice, but no substitute for a pilot or production model." See page 42:

<https://download.atlasrr.com/0524MCPDF/MAY2024HON100thVOL3MSRPOOnly.pdf>

- Mike Redden reports: "After a spring and summer full of travel I finally put my head down and designed a version of the Q-3 cab with the headend brakeman's seat to fit the Atheam Light Mikado. You may remember the first version was designed to fit the BLI Light Mikado. I had to lengthen the cab by about four scale inches and had to redesign the front of the cab to fit the Athearn. I had to revert to an early saved version, lengthening the cab and redoing everything I did after that. I added holes for the front grabs under the roof of the Q-3. I provide pre bent PBW wire for the grabs and the long roof handrails. You're on your own for the rear handrails."



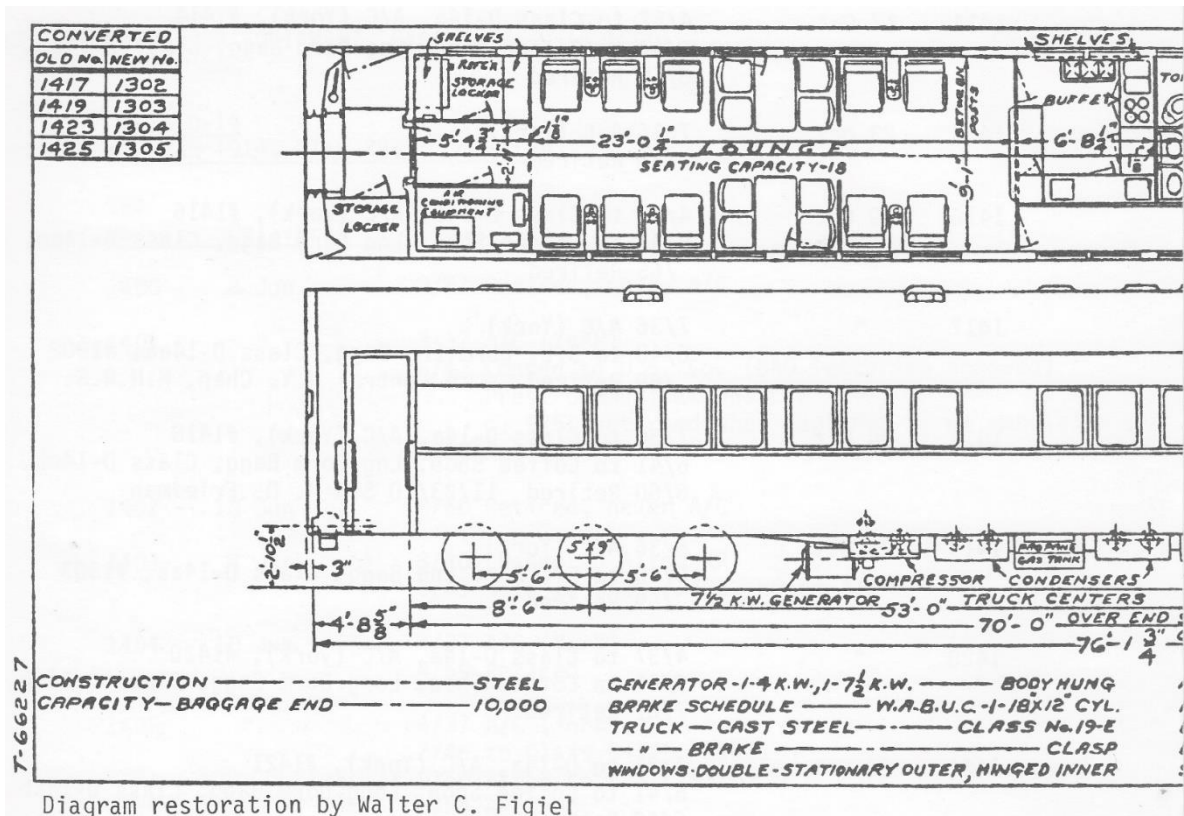
# BUILDING A D-14AA FOR THE NATIONAL LIMITED

BY BRUCE ELLIOTT

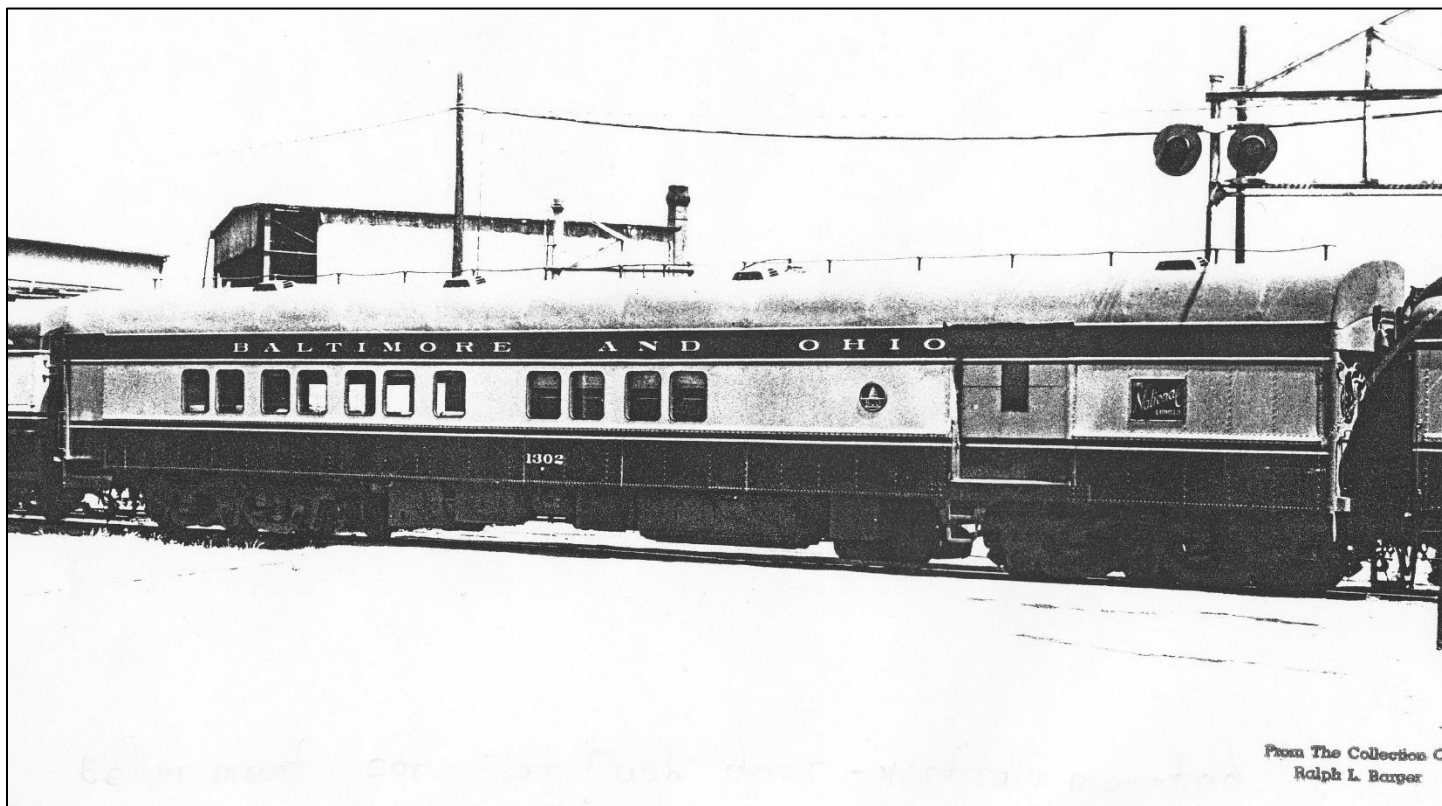


## WHAT IS A D-14AA?

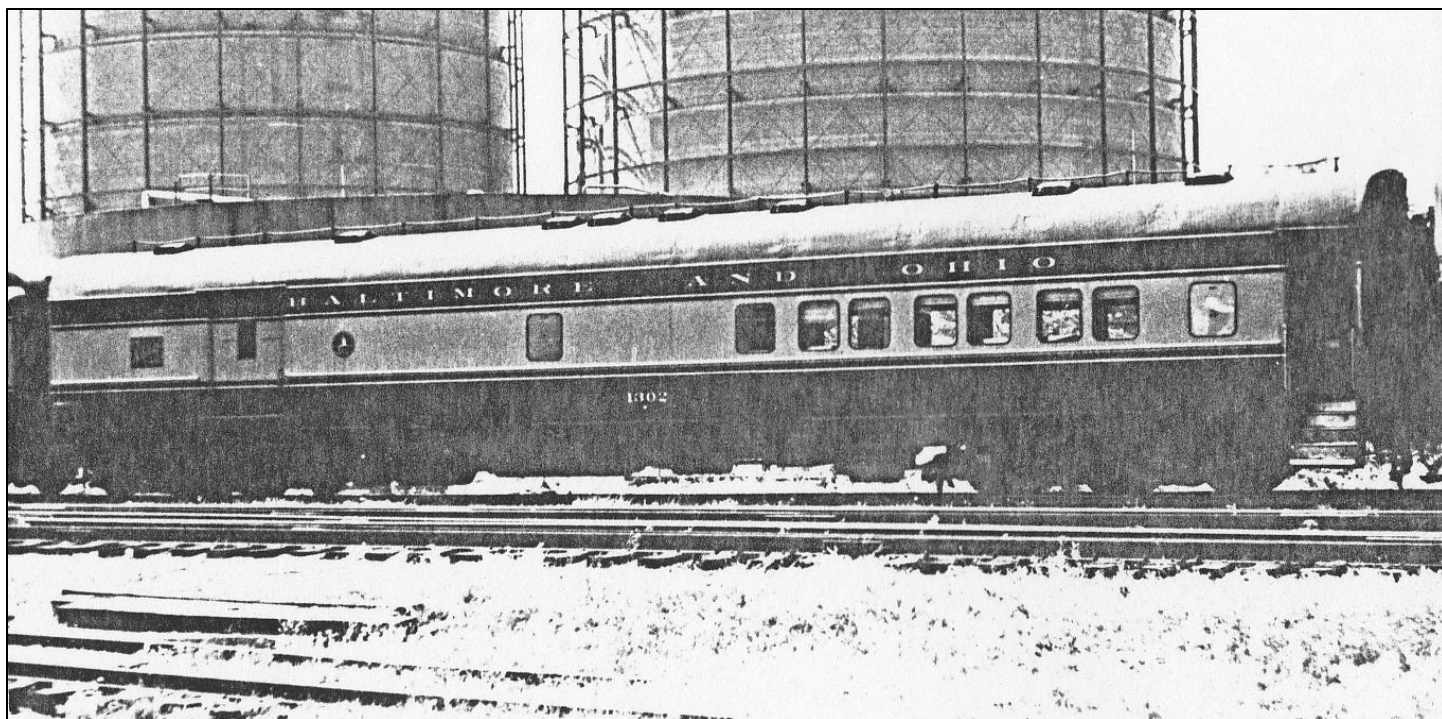
#1302 was initially delivered by Pullman on October 19<sup>th</sup>, 1917, and was modernized in June of 1940 for the *National Limited*, at the Mt. Clare shops. This car had a baggage section, a dormitory, and a buffet/lounge that also had a radio for passenger's entertainment. Modernization in 1940 included the Art Deco styled interior, a betterment roof, as well as full width diaphragms and full skirting as well as paired Thermopane windows.



However, by the early '50s the car had received the more traditional blue and gray paint scheme, and the full width diaphragms and full skirting between the trucks were removed due to the excessive labor required to maintain them. This car was retired in 1969.



*(Photo from the collection of Ralph L. Barger)*



*(September 1966, location and photographer unknown)*

## THE MODEL:

This model was the creation of Bud Stringham. The foundation of this car was a Rivarossi combine which had an AT&SF heritage. The Rivarossi combine was longer than a B&O car, so Bud cut it for length to match the prototype. Bud took .012 sheet brass and machined the correct window pattern for both sides of this car. Next, he machined the area between the belt rail and the letter board so that the brass strip would fit between them, and flush with the body. The betterment roof was also his creation. Two pieces of wood shoe molding were glued together, then with a custom-made router bit that would cut the exact shape of the betterment roof, it was trimmed, and the ends were trimmed to fit the length and contour of the Rivarossi body end. It was at this point that the customer took over construction and completion.



*(This is the left side. The area between the belt rail and the letterboard was milled out to a depth of .012 in preparation for the window strip.)*

The customer now had to cut out sections of the body between the belt rail and the letter board to make room for the new window openings and eventual window glass. Once adequate clearance was achieved the brass strip could be glued in. I use ACC for this step.



*\*In this view at the left is a /010 piece of styrene to fill the machined area to the left of the baggage door. The white "boxes" indicate areas that must be cut out for windows in the new window strip.)*





*(Here we see the body after it has been cut out to accommodate the new window strip. On the back side of the interior the new window openings can be seen where eventually the new window material will be glued to the back side of the brass window strip.)*



*\*In this view we see the left window strip installed)*

The vestibule area had to be reworked. This included blocking off the vestibule door on the right side. This was done for a storage locker. A .010 piece of evergreen styrene was used for this. The stationary vestibule steps had to be removed to make way for the folding skirt steps that were on the outside of the trucks. For these end skirts, I used the end skirts from a Rivarossi lightweight coach. It was necessary to build up/ fill in between the bottom of the door and the top of the skirt. This was done with a 6x14" strip, 3 ft. in length. The addition of the skirting added a clearance problem, the outer edge of the truck frame was hitting the inside of the skirting. It was necessary to do a bit of filing on the chain anchor on the truck to gain clearance to go around 34" radius. The application of stirrup steps by IHC for the baggage door was also a concern for clearance, but in the end was not a problem. On this model Bud had done some underframe detailing, by removing several items and installing the correct appliances in their proper location. I chose to retain the Rivarossi truck frames and replaced the wheel sets with 36" metal wheels. The Talgo truck coupler mounts were removed in preparation for body mounted couplers.

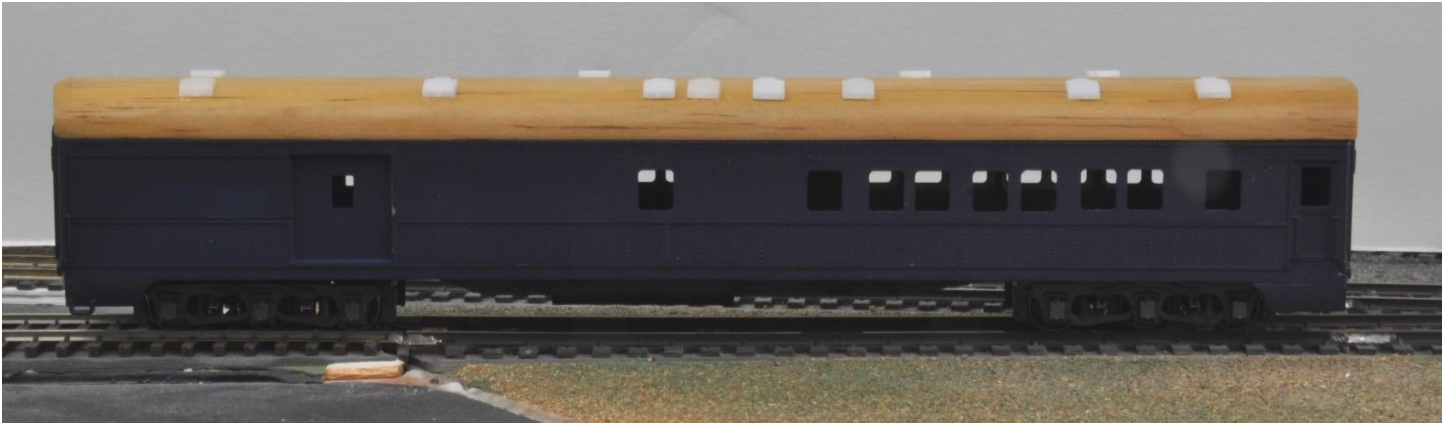


*(In this left side view, the original stirrup step at the left has been removed and replaced with a skirted stirrup step that was gleaned from a lightweight Rivarossi coach. On the right, on the vestibule end is the skirt from the vestibule end of a Rivarossi lightweight coach. Note that there is no stirrup step. Behind this skirt were the folding steps. The new skirt pieces only come up to the lower edge of the body, and therefore it was necessary to use Evergreen styrene to fill the void.)*



*(In this view of the right side, we see the old stirrup steps have been removed from the front of the car at the right and replaced with a skirted stirrup step from a Rivarossi lightweight coach. On the left, the vestibule door has been blocked off with a .010 piece of Evergreen styrene and the stationary vestibule step has been removed. The area behind this blocked off area is now for a storage locker. Additional pieces of Evergreen styrene were also necessary to fill the void between the bottom of the door and the new skirt that now has a stirrup step.)*

The betterment roof still needed a lot of help. Before painting, the first step was to seal the raw wood. This was done with a couple of clear semi-gloss coats and rubbed out with a fine grade of steel wool. Next was the application of 12 Garland roof vents that were located via a company drawing and photographs. Next came the radio antenna which had 16 stanchions (from Precision Scale Models) spaced 4.5 ft. apart, supporting the antenna which is a .0024 piece of brass wire after which the roof was ready for color. The antenna was not a part of the drawing, only in photos.



*(Roof vents have been installed, new window inserts have been installed and end skirts are now in place. This is the base coat of blue.)*



*(The radio antenna has been installed. There are 16 stanchions that support the antenna, which is a .0024 brass wire. The stanchions are spaced 4.5 ft. apart. This completes the roof assembly.)*

### **PAINTING:**

As my stash of Floquil diminishes I have had to resort to what is available. Both the blue and the gray are still Floquil, but the black is by True Color. This is an acetone base paint that will be much easier to clean out of an air brush. Before lettering, a coat of semi-gloss was applied to the body to give the decals a surface to adhere to.



*(The roof has now been painted.)*



(The gray band has now been painted.)

### STRIPING AND LETTERING:

This was done using Mt. Clare Shops and Micro Scale decals.



(Striping and lettering had been done, couplers, diaphragms and the hall wall have been added.)

### DETAILS:

After lettering comes the details. The easy ones are: first the Bethlehem Car Works diaphragms. This is followed by the Kadee #5 couplers body mounted that when secured are located with the knuckle just past the end of the diaphragm. My layout has a minimum radius of 40", so close coupling is possible. Next is the tedious part, that being the windows. For the most part, each window will be separate and cut to fit each window opening due to the irregularity of the opening behind the brass window strip. I do not do the usual interior details. Instead, to hide that big open void, I use window shades that are at various levels, however, in the hall across from the dormitory where there are no curtains, I have included a hall wall that is made from .020 evergreen styrene which is painted Floquil depot buff. Between this wall and the curtains, very little of the interior can be seen. The last detail before the roof goes on is the handrail in the hall. This is a .0024 piece of brass wire glued to three 4x4" pieces of Evergreen stock. The three pieces give adequate distance to support the wire as well as giving a visual relief to the handrail. You do not want to secure the handrail to the window. That would be noticeable.

Now, we are complete, with a car worthy of the head end of the *National Limited*.



*(Finished at last! Window glass, curtains and the hall railing were added. This is the left side. From L to R; baggage compartment, dormitory, lavatory, lounge and storage locker)*

There is no real list of materials for this car as it is a “one of” and its replication is not possible. There are many of Bud Stringham’s cars floating around out there, some built and many still in parts. This article describes the steps necessary to complete one of his cars. As time has gone on, available parts for these cars in a finished state has decreased to a point where only the window strips are to be found, and the betterment roofs have to be not only cut for length but tapered at the ends as well as cut to fit the recess of the sides and ends. This car had all these things done. I do not know exactly how many different cars Bud designed, but I have been blessed to have collected 12 different cars. Many cars Bud designed have yet to be built by a commercial manufacturer. My goal will be to complete all that I have and to do an article as a tribute to a pioneer in modernized B&O passenger cars.

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# **Baltimore & Ohio Diesel Tractor Dt-1**

## **HO Scale Model**

**BY THOMAS GOERNIG**

(All photos by author.)

### **INTRODUCTION**

I have spent many vacations in the US. I have also spent several days at the B&O museum in Baltimore. One day I found some old copies of The Sentinel that have been for sale at the museum store. One of them was Volume 13, Number 5, with an excellent report about the Fells Point operations at Baltimore harbor and the motive power that was used. One of the “Locomotives” was the Diesel Tractor, DT-1, a strange looking piece of equipment that did not go out of my mind. I think it is an interesting article about an unusual operation and its motive power that was not common in Germany.

Over the years I collected everything that I could find concerning the Diesel Tractor, DT-1. I was also looking for photos on the internet, but the best source was still the old copy of The Sentinel.

One day I found a steerable HO scale front truck axle in a local hobby shop, and the DT-1 was coming back to my mind. What was still missing are the different sized wheels, unfortunately I did not have the right match in my scrap-box. Then I discovered that the wheels of a Wiking Deutz-Fahr farm tractor are coming very close in size and appearance to the original. I bought one on eBay and started to build my HO-scale DT-1 model.

Apart from The Sentinel and some photos, which I also purchased on eBay, I did not have any additional sources. Unfortunately, I have never been able to see the DT-1 at the B&O museum during all my visits.

### **THE PROTOTYPE**

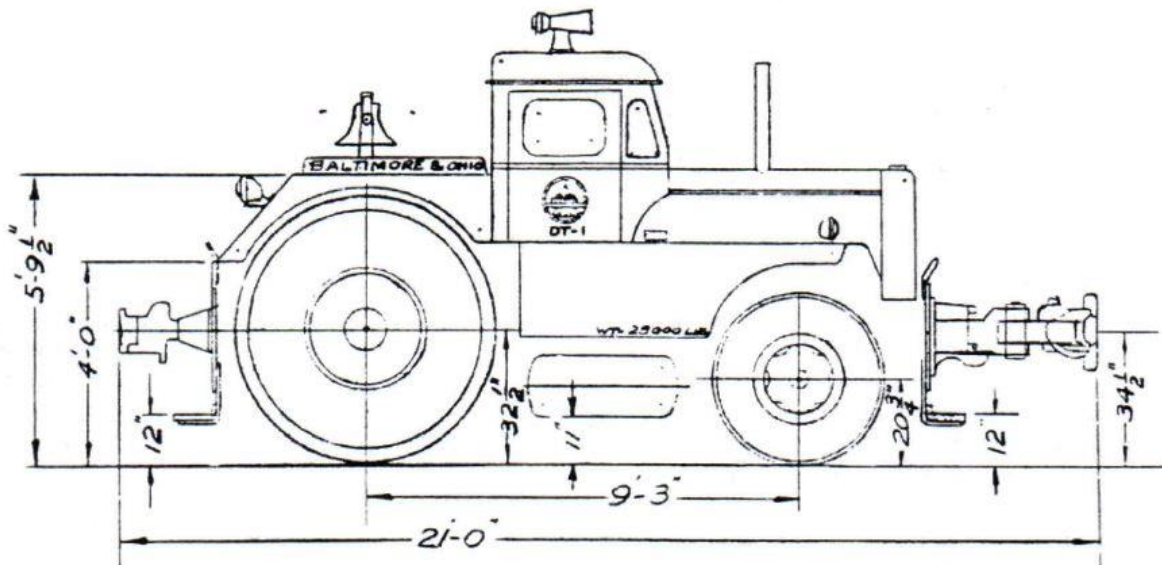
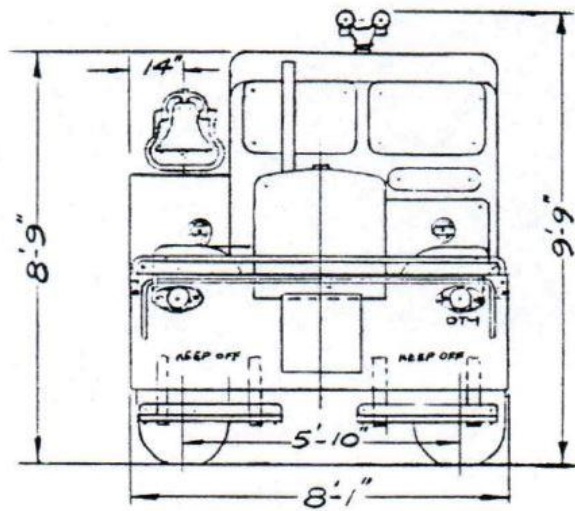
The prototype was built in 1954 by the Caterpillar Tractor Company for the Baltimore and Ohio Railroad and was numbered DT-1. This diesel tractor replaced the old No. 10 Electric Motor, Class CE-1 on the B&O's Fells Point operation, when the traction railroad was demised in the city. The Fells Point operation ended in 1983 and the Diesel Tractor DT-1 was moved to the B&O Museum. I guess it is still there and waiting for restoration. On the Google Satellite view you can see the DT-1 standing close to the CSX 18742 Shop Switcher at the museum premises.

11-26-54-A

### DIESEL TRACTOR

NO. D.T.-1 BUILT-1954  
CATERPILLAR TRACTOR CO.

HORSEPOWER \_\_\_\_\_ 115  
STARTING TRACTIVE EFFORT—16000 LBS  
TIRES-FRONT \_\_\_\_\_ 12:00 X 20  
TIRES-REAR \_\_\_\_\_ 21:00 X 25  
HAULING CAPACITY—8- LOADED CARS  
FUEL CAPACITY \_\_\_\_\_ 58-GALLONS  
FUEL CONSUMPTION \_\_\_\_\_ 2½ TO 3  
GALLONS PER HR. MAXIMUM LOAD  
SPEED \_\_\_\_\_ UPTO 18 MILES PER HR.  
WEIGHT WITH BALLAST—25,000 LBS.



T-84207

(DT-1 diagram - T-84207, picture from The Sentinel V13, No.5)

## THE MODEL

The model construction started with the DT-1 diagram T-84207 which I took from The Sentinel and scaled it down to HO-scale. As this was giving me the basic dimensions, I started to build a frame from different Evergreen styrene strips, it covers the complete length of the tractor. The next thing was to add the steerable front axle, which I believe is a must for such a piece of equipment. For the height of the axles, you must account for the different diameters of the front wheels and the much larger rear wheels, as it is shown in the diagram.



*(The unpainted model with the different wheels and the steerable front axle)*

Then I added the front and rear pilots, also built from sheet styrene with a lot of details. I added foot boards, poling pockets, coupler pockets, handrail, an air hose, and eye bolts for the coupler lift bar. This was done for the front and the rear pilot. It must be noticed that they are not identical. The rear pilot extends further down compared to the front pilot. At the front, the footboards have longer holders, reaching further down to the same height above the rails as the rear pilot. The rear body behind the cab was also built from sheet styrene, which was quite straightforward. I added a bell from an old Rivarossi steam engine, a grab iron and the two boards on the left and right that carried the "Baltimore and Ohio" lettering as it is shown in the diagram T-84207. I have only seen the lettering in very early photos. I guess it was never replaced when it vanished, or when the tractor was repainted over the years. I am also not sure if the DT-1 ever got repainted, but at least some markings are different on the various photos I have found. I modified two Kadee No. 5 couplers by trimming off the large center hole and drilling a new one, the couplers to be inserted into the coupler pockets together with the brass coupler extensions then secured with a small brass bolt. The coupler can move extremely far sideways as on the prototype to negotiate through sharp curves of Fells Point.

In the front view you can see the front fenders on the left and on the right. The tricky thing was to get the right curved shape that pointed inwards.





*(Front view)*



*(Rear view)*

The 6-cylinder engine was taken from an old Herpa truck. I added a small fan to the engine, which can rotate behind the radiator. The radiator is also entirely built from styrene and allows you to see through the front. The radiator itself is protected by a plate that is attached between the radiator and the front pilot. The plate has a pattern of holes as air intakes, which are slightly oversized, but I think that they still represent the prototypical appearance quite well.



*(Top view without the cab, showing the driver seat and the gearbox)*

The cab is built entirely of Evergreen styrene sheets and strips. All parts are glued together, the window openings are cut in and filed to the correct size with small needle files. I added small pieces of styrene to simulate the door hinges. The door handles, grab irons and windshield wipers were added to the rear and front windows. The roof has rounded edges as the prototype and an air horn was added on the top. The air horn was originally a 3-chime horn, but I removed the center one to make it look more like the prototype. The interior of the cab was detailed with a driver seat, steering wheel and a gear box that is detailed with a shift stick. The mirrors are scratch built from brass parts and 0.3mm bronze wire. The left and right mirror is different, as the cab is not centered on the main frame. On the driver's side a step was added, made from a piece of brass wire.



*(Driver side)*



*(Opposite side)*

The underbody of the D-1 model is also detailed, a gearbox, drive shaft and differential gear is added to the center frame. Most of the parts came from an old Herpa truck model. On the left and right side underneath the cab I have added two air tanks as on the prototype. I completed the underbody by adding air pipes and draining valves to the air tanks.



*(The detailed underbody)*

## Paint and Decals

The underbody of the model is painted in flat anthracite, the rest in a glossy dark blue which comes close to B&O blue that is visible on some color photos. The upper part and the inside of the cab is painted in a light grey, the gearbox in an aluminum color.

By looking through my collection of decals I found that I did not have any small B&O signs, not even a “Baltimore and Ohio” lettering for the sides on the rear. Then I came across Microscale, N-scale decals. There I found a Capitol Dome decal which is small enough, representing the gold B&O logo on the doors and the rear. The order from the United States came within two weeks.

After I applied the decals, I spray painted the model with a clear flat finish and added some light weathering.

## Conclusion

I tried to build a representable scale model of the DT-1. I have added as much detail as possible that could be identified from the different photos. I know that I may have missed one or the other detail, but overall, I think the result turned out to be quite well.

The tractor is serving some industries on my freelanced B&O model railroad that has also some street running operation included.



*(You can almost imagine the DT-1 pulling an N-0 hopper along Thames Street in Baltimore)*

## Bill of Materials

Manufacturer	Part Number	Description
Wiking	0386 00	Deutz Fahr Farm Tractor
Sol Expert	96456	Steerable Truck front axle
Evergreen	-	sheets, strips, rods, tubes
Albon Alloys	BW03 BW04	Brass Rod 0.3mm Brass Rod 0.4mm
HO-fine	#816	Phosphor Bronze Wire 0.3mm
Tichy Train Group	2042	Eyebolts
Cal-Scale	-	Drain Valves
Details West	326	Leslie Air Horn S-3L
Rivarossi	-	Bell
Kadee	KD005 KD438	Couplers Air Hose Angle Cock
Hi-Tech Details	6038	22" AAR Air Hoses
A.Line	29200	Windshield Wipers - Long & Short
Herpa	-	6-Cylinder Diesel Engine Gearbox, Differential Gear Box
Microscale	60-83	N-Scale – B&O Steam Decals

## References

- The Sentinel*, Volume 13, Number 5, September/October, 1991, Page 6, Fells Point – B&O's Ultimate Oddity
- The Sentinel*, Volume 30, First Quarter 2008, back cover
- BORHS #74151, Diagrams of Equipment "Electric, Oil-Electric, Gasoline and Diesel Tractor Locomotives"*
- Baltimore and Ohio Reflections of the Capitol Dome*, Stephen J. Salamon, David P. Oroszi, David P. Ori, Old Line Graphics, 1993, page 35.
- B&O Color Guide to Freight and Passenger Equipment*, Craig T. Bossler, Morning Sun Books, 1996, page 126
- B&O Power in Color, Volume 1, Steam and Cab Units*, Bob Withers, Morning Sun Books, 2017, page 32
- BORHS Calendar*, July 2019
- B&O in Baltimore*, Baltimore and Ohio Railroad Historical Society, 2019, page 75, page 76
- A Guide to Historical Modeling of Baltimore and Ohio Railroad Locomotives from 1900 to 1987*, Gregory M. Smith, Baltimore and Ohio Railroad Historical Society, 2021, page 440

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## Scale House at Fairmont

BY BRUCE ELLIOTT

(All photos by author.)



This was the last structure to be finished and among the first ones at Fairmont built. The model was built from a single photo taken back in the 90's at the society convention and a drawing from the 1906 standard plans book. Fairmont scaled many cars each day for years, yet this is the smallest scale house in the standard plans book. The scale house base is from a Walthers kit. While the base was perfect for my application, the houses that came with the kit were too big. This structure was built using Evergreen styrene and a Grandt Line door. The red color is a custom blend that I created at least 15 years ago to simulate my perception of "Indian Red".



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## Modeling an EMC SW1 on the “Nonstandard Railroad of the World”

By KENNARD WING

(All photos by author unless otherwise specified.)



*(Fig 1: Painted, lettered, and weathered SW1 203, awaiting its next assignment.)*

At the Wilmington & Western RR, where I volunteer in the shops, B&O SW1 8408 is still hard at work 84 years after it was delivered to the B&O (Figure 2). It looks good in its late 1950s paint and lettering scheme. I decided I'd like to have a model of it, but with its original number, 208, since I model circa 1950. This was my first effort at modeling a specific piece of B&O rolling stock with historical accuracy.



(Fig 2: SW1 8408 at the Wilmington & Western RR, March 2023)

I purchased an MTH SW1 lettered for Great Northern, and after getting some online advice, and testing on a hopper I didn't care about, stripped it using 91% isopropyl alcohol.

Brian Rochon had written an article for the *Sentinel* (2020 Q2) on these locos, so I thought I had accurate information. Then, while at the Archives for a Mini-Con, I noticed the original painting and lettering diagram for diesel switchers, which happened to show 200, the original SW1. I took a photo with my phone, but Brian later sent me a scan (Figure 3).



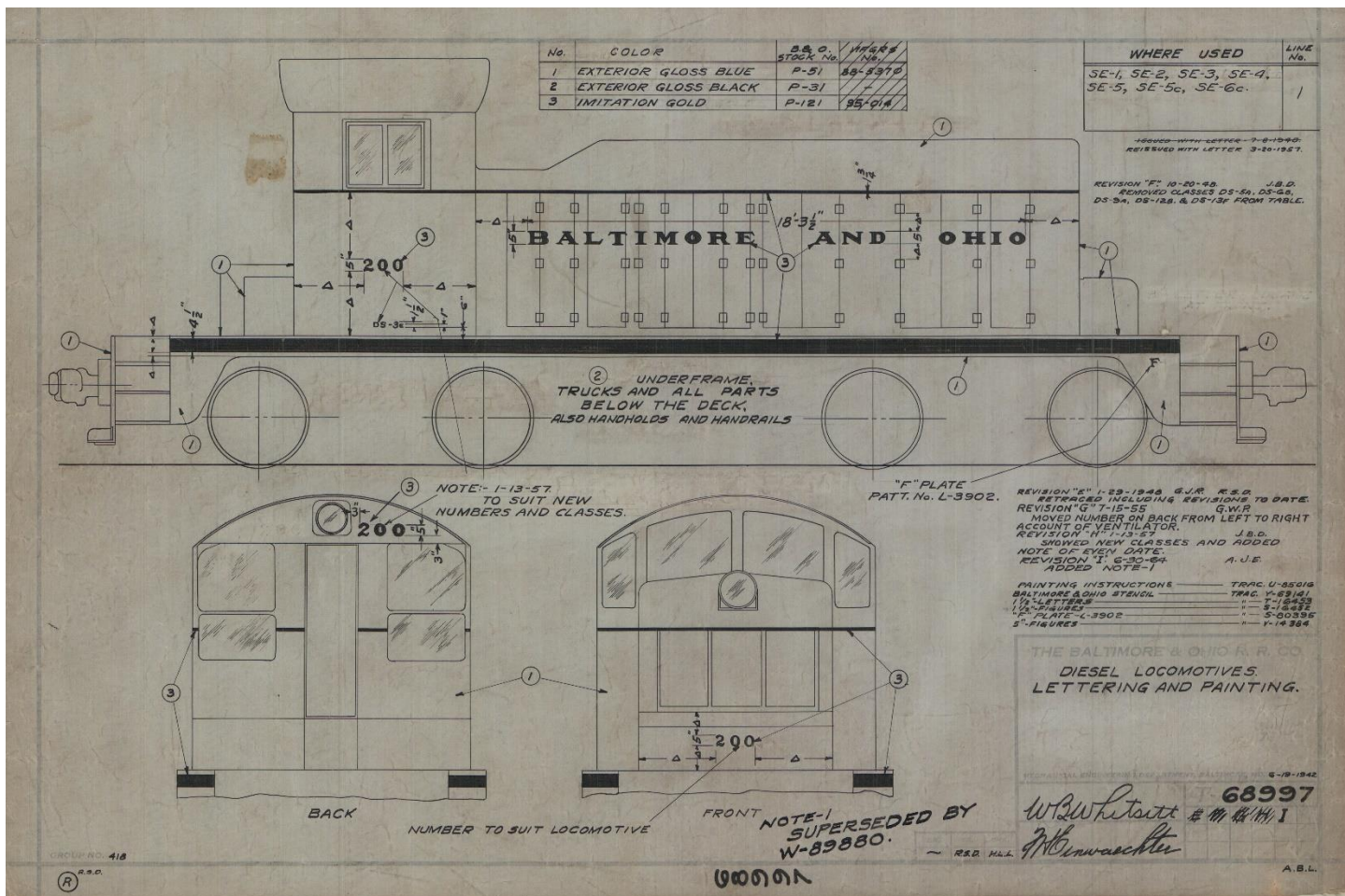
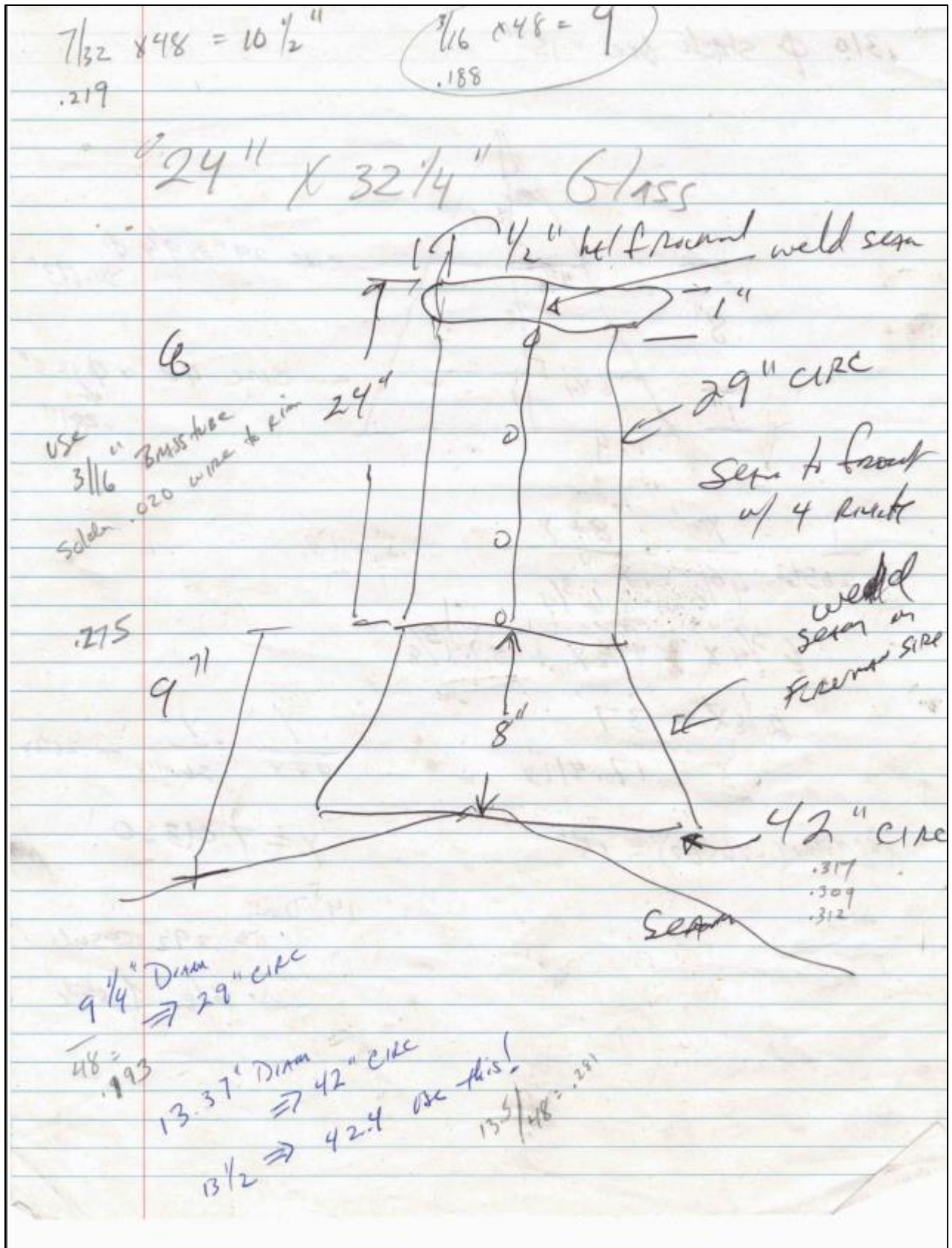


Fig 3: Official B&O painting and lettering diagram for diesel switchers. SW1 200 is the poster child. Note the rear cab number on the engineer's side, and no mention of how to paint the safety appliances. (Courtesy B&ORHS Archives)

My model came with the later conical stack, but 208 had the original short stack, which was soon replaced with a longer one by the railroad. I took some photos and measurements of 8408 (Figures 4 and 5) and fabricated a new stack. I soldered a .015" wire around the circumference of a 3/16" brass tube, formed a blob of Tamiya putty on one end, and turned the putty to a taper on a lathe. I'll spare you the math that converted my measurements into the result that the cone at the base of the stack has a 30-degree included angle, requiring setting the taper angle on the lathe to 15 degrees. A more accurate model would have a half-round at the top instead of wire and would have rivets on the side facing the cab.



*Fig 4: Photo of the stack on 8408, showing the homemade version added by the B&O to replace the unsuccessful original short stack, and the aluminum color adopted at some point in the 1950s.*



(Fig 5: I made this rough drawing of 8408's stack while taking measurements on top of the hood. I am a bonafide WWRR shop worker who has worked on 8408, and I put up a blue flag before climbing up there, so this activity was safe and legitimate.)

Another online canvass regarded what blue to use. I was more concerned about matching commercially painted locos and passenger cars than a paint chip or drift card. I ended up choosing Tru-Color BandO Blue TCP-334. The project was delayed as it took me some time to figure out how to get the window inserts out of the cab before painting.

The project was held up again when someone posted on the B&O io.group a March 1, 1949 document from the B&O Public Relations department describing painting practices (Figure 6). This document said the cab interior of diesel yard locomotives was “green.” My follow-up request for photos or documentation produced many opinions and remembrances, but nothing definitive as to the shade of green used. I also inspected hidden nooks and crannies of 8408’s cab, but it seems it was sandblasted at some point and sprayed gray. I chose Tamiya XF-21 Sky since a plurality of responses suggested it was a light shade of green. During the conversation, a similar February 1, 1952 document was posted that listed switcher cab interiors as gray.

THE BALTIMORE AND OHIO RAILROAD COMPANY  
 Public Relations Department  
 1202 B & O Building  
 Baltimore 1, Maryland

Official Color Chart for Baltimore and Ohio Railroad Rolling Stock as of March 1, 1949:

Steam Locom. - Special

Exterior, blue  
 Cab interior, green  
 Lettering, gold

Steam Locom. - Standard

Exterior, black  
 Cab interior, green (T-1 class has rust sash)  
 Lettering, gold

Diesel Locom.

Exterior, blue, gray, black  
 Interior, gray  
 Striping and lettering, gold

Diesel Yard Locom.

Exterior, blue  
 Cab interior, green  
 Lettering, gold

Exterior Painting

Conventional Passenger Cars

Body, blue with 1" gold color stripe on girder sheet as shown on prints T-46557-K, T-49481-E, T-50065-1  
 Roof and ventilators, black  
 Steps, Treads - aluminum, Risers, Royal Blue  
 Trucks and Underframe, black  
 Front of water pressure tank, condensers, compressor, battery and equipment boxes, blue  
 Lettering and marking, gold color paint

Streamlined Passenger Cars

Body, letterboard, top of belt rail to bottom of skirting, blue; area between letter board and top of belt rail, gray  
 Roof, blue and gray, see prints X-62409-K, V-64294-E, U-64126-K, Y-66056-E, U-66081-G, U-68228-H, U-74212-C and V-75939  
 Diaphragm, blue  
 Trucks, black, except lightweight sleepers and two B-car daylight trains which are aluminum  
 Underframe, black

Exterior Painting

Streamlined Passenger Cars (Continued)

Front of water pressure tank, condensers, compressor, battery and equipment boxes, blue  
 Steps, aluminum  
 Handholds, stainless steel  
 Lettering, Marking and Striping, gold, all cars except those in Cincinnati trains which have aluminum raised letters and figures and aluminum color striping

Box Cars

Body and roof, bright red oxide, underframe and trucks, black, lettering, white

Steel Gondola and Hopper Cars

All parts, black - Lettering, white

Caboose and Wreck Train Cars

Body and roof, devil's red - Safety appliances, yellow - Underframe and trucks, black - Lettering, white

Covered Hopper Cars

Body gray - Underframe and trucks, black - Lettering, black

Work Equipment - Wood

Body and roof, bright red oxide  
 Underframe and trucks, black  
 Lettering, white

Work Equipment - Steel

Body, underframe and trucks, black  
 Lettering, white

FROM THE ARCHIVES OF THE



GEORGE F. NIXON  
 COLLECTION

#573

Fig 6: B&O's Public Relations department issued this guide to rolling stock colors, dated March 1, 1949. This is where we learned cab interiors of diesel yard locomotives were some shade of green. (Courtesy B&ORHS Archives)

Another question arose about the color to paint the stack. In the early days, the stacks were painted to match the car body, but the heat burned off the paint. Later, the B&O began painting the stacks a heat-resistant aluminum color. The photos I had with blue stacks were much older than 1950; the photos with aluminum stacks much later. My query to the io.group resulted in one of those refer-to-photos-there-was-no-clear-start-or-end-date answers. I decided to go with blue.

I purchased decals from Ed Sauers. Ed models in S scale but will have them printed for you in your scale. He works from head-on prototype photos, so his decals are highly accurate for B&O. Unfortunately, his decal sheet has only two 8's on it. Since the road number appears on all four sides, I needed four 8's to letter my model 208. I picked 203, one of the numbers in the set that there were four of.

The lettering diagram shows the road number on the rear of the cab over the window on the engineer's side. The only photo in Brian's article that shows the rear of the cab is of 210 (Figure 7). It has the road number over the window on the fireman's side. I placed my road number on the fireman's side instead of following the location prescribed by the official lettering diagram since, apparently, the shops didn't follow it either.



*Fig 7: This photo of 210 shows the rear number on the fireman's side and the long road name on the hood. I first saw it in Brian Rochon's 2nd Quarter 2020 Sentinel article on the SWI. (Courtesy B&ORHS Archives)*

The lettering diagram shows the Baltimore-and-Ohio name extending almost the entire length of the hood. Most of the early photos in Brian's article—those of 200, 202, and 204—show a shorter road name about half that length. The decal sheet contains both. I really prefer the look of the longer road name, and that's what 8408 wears today. After some study, I noticed that 210 appeared to have the longer road name, so I chose that. Now I was wishing I had lettered it 210, but the sheet only had two ones, so I couldn't do that number either.

Ed's decal set includes the Safety First Watch Your Step stencils that appear on the rear of 210. I find it interesting that they do not appear on the front in any of the photos in the article.

I love the capitol dome on the front of humble switchers, and 8408 has one today. Unfortunately, it does not show on the lettering diagram, and none of the early photos in Brian's article show one. My query to the io-group about their timeframe resulted in another refer-to-photos-there-was-no-clear-start-or-end-date answer. I left it off.

The painting diagram makes no mention of the painting of safety appliances. Presumably, they are covered in another diagram. Checking in with the io.group, it seems locomotive safety appliances were black in the 1950s and were not painted yellow until the 1960s. Absent definitive guidance, I chose to paint only the portion one would use in climbing the steps black, leaving most handrails blue. I was surprised to learn locomotive safety appliances were black, given that cabooses safety appliances had been yellow since 1945.

I had some trepidation about decaling the long road name and stripes but found Ed's decals easy to work with. I followed his instructions, and didn't use Micro Set until the decal was in place on the model. Figure 8 shows the loco fresh out of the paint shop (see cover).

Although this loco had been in service ten years by 1950, B&O took good care of its iron horses in this period, so I limited weathering to some soot on the stack and cab roof, and airbrushed dirt around the bottom on both sides and ends. For the dirt, I used a 50-50 mix of Tamiya XF-52 Flat Earth and XF-57 Buff, followed up by straight XF-52 Flat Earth. I also airbrushed down from the top the cab roof, and walkways. Next, I airbrushed Tamiya Nato Black XF-69 on the running gear, stack, and cab roof. I wasn't happy with the black on the stack or roof, so used Monroe Grimy Black weathering powder on them. Monroe Old Rust weathering powder was brushed on the couplers, too. A coat of Tamiya XF-86 Flat Clear completed the job.

The resources we have available to us to model the B&O are amazing—the Society archives and staff, and the folks in the io.group—and the detective work involved in researching this project was fun in its own right. On the other hand, B&O's penchant for standardizing nothing but the track gauge makes it challenging to model a specific piece of equipment unless you have photos of that specific item in the timeframe you model.

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## More Headend Brakeman Cab Conversions!

BY BRUCE ELLIOTT



*(This is a Rivarossi conversion with one of David Glover's cabs. David did the chassis conversion, swapping out the Rivarossi drive train for an IHC drive train. I did the cab, backhead and footboard changes and it has an LMB tender.)*

(Editor's note: This article follows up on articles and product announcements in previous issues of the magazine.)



Just a note on more cab conversions. This week I have completed two more headend brakeman cab conversions. The first one was on another Akane, with Mike Redden's 3D print. As I suspected the necessary shims were different from one model to another. Of course, after you do one, the next one is a bit easier.



*(This is the Akane Q-4b.)*

This left me with just one more cab conversion, that being a brass LMB S-1, 2-10-2. The S-1 has a larger cab than a Q. This replacement cab was the creation of David Grover and designed for the Rivarossi model. The same basic principles applied in this case. No shims were necessary, but a little cab material had to be removed for the boiler course. There are some differences between Mike's cab and Dave's cab. Mike's cab is pure and simple, straight from the drawing board and is a 3D print. On the other hand, Dave's is a resin casting and does have slight imperfections. However, it does have cab roof detail, even though it can't be seen.



*(This is the LMB S-1. I like that David even included the headend brakeman. The real challenge will be painting him. Though this casting is close to 30 years old, it has interior roof detail that Mike's 3D print doesn't, even though you can't see it)*



*(Being 30 years old, with fullbackhead detail and knowing this was done as a casting, I can only imagine what this would look like if David had known about 3D printing. The stoker detail below the deck was also some of his handy work.)*

Mike's is state of the art and Dave's is almost 30 years old. Until I can make arrangements to get them painted, they will most likely spend some time in an unpainted state.

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# MY FAVORITE MODEL

## Fran Giacomini Scale Tool Car

Scale tool car X3848 started out as a Westerfield kit #5053 (B&O M-15J box car) modified with purchased parts and items from my “car parts” drawer. One photo shows it in use with a scale test car at the Winchester scale on my late September 1956 era HO Shenandoah SD layout. I used a prototype photo of B&O car #3846 that is in Railway Prototype Cyclopedia #12 on Page 37 for reference.



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