THE B&O MODELER

Number 54

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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 of 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 are able to 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:

B&ORRHS
ATTN: Membership
P. O. Box 1608
Sykesville, MD 21784-1608

FROM THE EDITOR
JOHN TEICHMOELLER

Change…are we used to it by now? You, our readers, are by now no longer surprised by the changes we continue to experience in our personal and hobby lives. And change is coming to *The B&O Modeler*.

But first an update on the situation behind this issue, No. 54. Even though *The Modeler* does not follow a set publication schedule, we have tried to get out three issues a year. Issue 53 was published in April of 2021, and our goal was to get 54 out by August. We had a good supply of material and we were able to get it edited as the summer progressed. Unfortunately, Scott Seders found himself in one of those all-consuming work projects that prevented him from being able to devote the necessary time energy to doing the page layout. The good news is that Bruce Griffin, the original *Modeler* editor, has stepped up to the plate to put together a respectable issue.

As it turns out, we had an abundance of material for No. 54; in view of the delay, however, we have decided to go ahead and leave part of the material for the next issue, No. 55. Which brings us to the subject of the next issue.

Yes, as you have probably heard, after sixteen issues, it's time for Scott, Clark and me to turn *The B&O Modeler* over to a new crew.

We thank all the contributors who took the time and trouble to document and illustrate their modeling efforts. We hope that you, like us, have learned something from the diverse skills and techniques we were able to publish.

The good news is that Bruce Griffin is willing to continue laying out issues, if an Editor comes forward. What are the job requirements? Well, for starters, any editorial experience is helpful, e.g., as an editor for your church, club or NMRA Division or Region. I would offer an encouraging word that we generally have not had a problem with material, between submissions that have just "shown up" to pieces that have been developed with authors in some cases resulting from a discussion thread on one of the list groups. Since there is no budget, you don't have to go begging for funds to the B&ORRHS. As to the material "left over from 54," there are several items including one article that will be at least 30 pages long. I am sure this one will be very well received since it is about Bruce Elliott's passenger car modeling.

Before you agree to take over the editorial duties, I'm sure there are a lot of questions you would have, and I would be happy to answer these. (One question area that has come up concerns availability of supporting material such as equipment diagrams and photos. Don't forget we have credited access to all the Morning Sun images, and diagrams are for the most part readily available. Having easy physical access to the Eldersburg archives is not necessary at all.) One option to consider is even a "guest editorship" if you are concerned about a "life sentence." Readers who are long time members of the B&ORRHS may recall we did this for *The Sentinel* in the past.

Feel free to contact me via e-mail (rmighpr@comcast.net) or by phone (410-531-3207). Let's get Bruce Elliott's "One Man's Roster" in print!

B&O MODELING IN THE ENTHUSIAST PRESS
CAPTURE AND COMMENTARY BY JOHN TEICHMOELLER

The following items covering B&O modeling subjects were spotted in the "enthusiast press." It seems like it's getting harder and harder to find material regarding the "true" B&O so we include Chessie System and even CSX as long as it has B&O reporting marks. JT

"B&O Power in Transition: ScaleTrains.com CSX SD40-2". Review by David Otte in *Model Railroad News*, June 2021, pages 58-66. The actual model reviewed is in blue and gray CSX paint, but I guess the small B&O lettering

on the cab still qualifies for listing here. The model itself maintains the lofty quality and fidelity standards that are to be expected from this manufacturer. The review contains a good deal of historical prototype information and has 4 model and 7 prototype photos including a tableau illustrating various versions of "CSX." As I understand it, the model is not offered in the original B&O delivery scheme of Enchantment Blue and Federal Yellow. The review includes the expected "naked" view of the mechanism and tells how to make it naked.

"The Last Cats: Walthers Mainline Chessie System SD50" Review by Wesley James in *Model Railroad News*, June 2021, pages 50-57. These diesels are said to be the last new units built for the B&O so even though the review specimen is painted in Chessie colors, its B&O reporting marks qualifies for listing here. In fact, the review gives some background of the evolution of the Chessie identity. The model gets good marks regarding decoration; it lacks the extensive detail level of other products such as those of Scale Trains but is budget-priced accordingly. Walthers provides drilling dimples for lift rings and grab irons that are available as a separate detail package.

"Weathering an HO Scale Chessie System SD40-2" by Jason Quinn. *Railroad Model Craftsman*, June 2021, pages 84-89. Jason starts his defilement with a (gasp) ScaleTrains.com "rivet counter" series model in Chessie paint and B&O reporting marks and proceeds to add five years of road grime. It's time to throw away those bottles of thickened Floquil and PolyScale and follow Jason's techniques using an assortment of Tamiya and Ammo by Mig Jimenez paints and PanPastels. There have been a number of weathering articles in recent years also using contemporary paints and powders. Some of these articles suggest their way represents "short cut" approaches, but this isn't one of them. Jason gives us no estimate of the time he took.

"'Grounded' Wagon-Tops" by Dwight Jones. *The Sentinel*, Third Quarter 2021, pages 27-33. This is not a modeling article but it gives plenty of ideas for using retired wagon-top boxcars as yard sheds, with 26 photos, many in color. Also included, to help you keep the classes straight, are diagrams of the M-15a, M-15p and M-53 as well as a "family tree" showing evolution of rebuilds. Don't sacrifice your Tangent or Exactrail beauties however; instead there are vendors who keep bringing those old Cannonball Car Shops kits to shows; make them an offer. Another approach is to just use the body from those various wagontop resin kits you'll never build.

"A Yellowstone in the Alleghenies—Bachmann's Spectrum B&O EM-1 class 2-8-8-4 in N scale," review by David Otte in *Model Railroad News*, June 2021, pages 44-49. The latest run of the EM-1 in N scale offers sound and the "small dome" configuration. The original run, without factory sound, was issued in 2013. The model receives very favorable commentary both from a detail and operational standpoint. One word of caution, brought out by recent discussion threads on-line: do not count on the availability of spare parts in the future; the prudent operator of these units would wait until they go on sale by, say, Micromark or Trainworld and buy at reduced prices one or two "parts spares" for the future.

"Cumberland West—combining elements of Baltimore & Ohio and Western Maryland operations in 1953," by David Parks. *Railroad Model Craftsman*, July 2021, pages 38-45. This is a very sophisticated and complicated layout. David, a frequent attendee at B&ORRHS conventions, describes his layout as an "interactive panorama of railroad operations in Cumberland as they were in 1953." One or more videos of the layout have circulated on the Internet for a number of years but I always had a hard time getting a complete sense of it; however being able to study the track plan in this article, I now get a better grasp of what is going on. As I understand it, the layout is already extensively instrumented and automated, and David has plans for utilizing more technology as it develops, specifically in the area of lighting and sounds. For example, he is experimenting with DCC-controlled uncoupling which is apparently not quite ready for prime time. He also wants to be able to integrate crew operations with automated train activity.

Andy Holzopfel's M&K engine house, pictured in the color section of Robert's *West End*, was seen in California 16 years ago. David Parks and Sam Romerstein built this small module to later incorporate in David's layout. The EL-5 is from Overland and the Q4 is a PSC. Photograph by Sam Romerstein.

"GP-18 arrives for Athearn Genesis," review by Tony Cook in *Model Railroad News*, August 2021, pages 60-61. The model reviewed is N&W No. 902, but Athearn has also produced the only GP-18 on the B&O roster, No. 6599. The GP-18 is new to the Athearn Genesis line. Actual detail discussion of model vs. prototype in the review concern the N&W version. There is no mention of any B&O specific details but based on photos of the N&W model, detail level is consistent with expectations from the Genesis brand.

NEW PRODUCTS

COMPILED BY CLARK CONE

PHOTOS FROM MANUFACTURERS UNLESS OTHERWISE SPECIFIED.

We will try to avoid frustrating readers with published delivery dates or order deadlines since such scheduling appears to be out of anyone's control. Certainly there are some nice new items rolling out, so the best bet to avoid "missing" something is to stay in touch with your dealer or the manufacturer's website. For some strange reason, there seem to be fewer "foobies" this time than usual.

Walthers Mainline HO scale Railgon 53-foot gondola

Thrall prototype, car features a mix of molded and separate, factory-applied parts; 36" metal wheels mounted on plastic axles; and body-mounted Proto-Max metal couplers. This a Mainline, not Proto series issue so as expected

grab irons appear to be molded on and there are no cut levers. https://www.walthers.com (Around September 2020, Arrowhead Models issued their version of the Railgon with exquisite details but I think it had CSX reporting marks).

Tangent Scale Models - HO O-59a drop-end gondola

Tangent has released a 1940 class O-59A gondola in as-delivered Capitol Dome scheme. Basically, a Bethlehem Steel Co., 52ft-6in, 70-ton, riveted-side, drop-end gondola, it will be available in six new road numbers [three each for March and April] and 1957 class O-59 repaint in six numbers, prototype-specific details, wire grab irons, uncoupling levers, and Kadee scale couplers. **Tangent Scale Models**, 828-279-6106, https://www.tangentscalemodels.com

Bachmann HO scale "USRA 0-6-0"

Bachmann is releasing what they call a USRA 0-6-0 and slope tender in HO scale. This model is an 0-6-0 but differs from the USRA prototype of which LifeLike did a nice version some years ago (B&O class D-30). But this model has an operating smoke unit. bachmanntrains.com

E7A diesel in Z scale

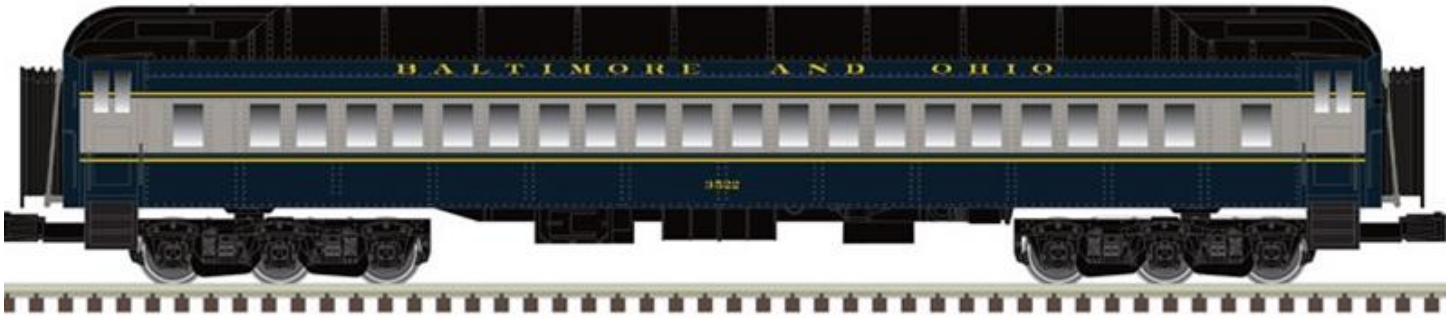
Z scale (1:220) was introduced by the Marklin Company in Germany in 1972 and is the smallest commercially-available model railroad scale. In recent years we have seen an increasing availability of American prototypes. So the Z scale EMD **E7A** diesel locomotive from American Z Line is a welcome new product and who doesn't love

the B&O blue and gray? The model is available in two B&O road numbers, has a direct-current (DC) 7mm motor, dual flywheels, metal steps, directional light-emitting-diode (LED) lighting, optional front truck-mounted coupler, blackened metal wheels, and AutoLatch couplers. No mention of DCC or sound options. If we were willing to pay defense industry prices, I guess by this time we could have decoders small enough to fit these diesels, but they do gradually keep getting smaller, and we will just have to wait. https://www.americanzline.com/locomotives/e7/

Athearn Roundhouse HO scale 34′ offset side twin-bay open hopper

It's hard to tell from the advertising artwork, but this looks to be a R-T-R recycling of Athearn's old kit of twin offset hopper tooling, a decent stand-in for classes N-35 and N-41, although the artwork looks like a straight side car. Class lettering, if any, is not legible on the promo artwork, and number series may be a C&O car. There is no enhanced detailing cited although some of Athearn's reissue Roundhouse cars have featured wire grabs, so who knows what we've got here. Isn't it a pity that we can't have an injection molded N-12? http://www.athearn.com

Atlas O scale 70' Madison Heavyweight Passenger Car Set



The O scale, blue/gray, 3-rail set includes baggage car #663, coach #3516, coach #3522, and observation car "John T. Collinson" #908. Cars feature ABS Bodies, Metal Wheels and Axles, Constant Voltage Overhead LED Interior Lighting, Operating Die-Cast Metal Couplers, Diaphragms, Separate Metal Handrails, Fast-Angle Wheel Sets with Needle-Point Axles, Detailed Car Interiors, Detailed Car Undercarriage, Sliding Baggage Car Doors, Die-Cast 6-Wheel Trucks. Dimensions are 19" x 2 7/16" x 3 1/2"; Operates on O-42 Curveshttps://shop.atlasrr.com

Bachmann HO scale E7-A diesel locomotive

Bachmann's latest cab unit is decorated for Baltimore & Ohio; one road number. The E7A has a die-cast metal frame, all-wheel drive, illuminated number boxes, and a SoundTraxx Sound Value diesel sound package. www.bachmanntrains.com

Broadway Limited EMD F3 in HO scale

The EMD F3 release will include A- and B-units with prototypically accurate road numbers and paint schemes. Available are A-B sets with powered A-units (w/ Paragon4 Sound) and unpowered B-units, and also separate single A- and B-units with a full Paragon4 DC/DCC/Sound system. The models will have road-specific details and lighting.

Individually controllable lights include Headlight, Mars Light (where applicable), Numberboard Lights, Classification Lights and Cab Light. The F3B will be available separately. https://www.broadway-limited.com.

Bachmann N scale old-time box car

Bachmann has added a B&O boxcar to its selection of N scale old time, truss rod-era box cars. Truss rods are on the coarse side. bachmanntrains.com.

N-Scale 40’ Boxcar from Micro-Trains

Something a little different, here. The running board on this 40′ standard box car has been removed, however, the ladders remain full height. The N scale model is decorated as a Baltimore & Ohio class B-6 boxcar.

Rapido HO scale USRA 50-ton Single Sheathed boxcar

Rapido’s new ready-to-run model of the B&O’s class M-24 will come with KC brakes; however, AB brakes that can be installed by the modeler if desired, will be included with each car. HO USRA single sheathed boxcars have been offered before, subject to various shortcomings (Tichy, Westerfield), but Rapido's new model of the single-sheathed boxcar features an all-new body with correct steel underframe and correct free-standing details. Models will be equipped with either KC or AB brakes as appropriate. Wood, Youngstown corrugated and Creco panel doors will also be available as appropriate. Car features USRA Andrews trucks with in-line brake shoes, and blackened turned-metal wheels.

This car should be a winner if it is era-specific for your layout, as Rapido delivers a splendid product. Prototypes lasted in substantial numbers until 1952 and there were still 5 showing in 1960.

Rapido HO scale Fairbanks-Morse H-16-44

Due to weak advance interest, Rapido has decided to try to relaunch the Fairbanks-Morse H-16-44 model, now adding a hard deadline to see if this project can go ahead. That deadline was September 15, 2021 and it looks like they are going ahead with the project. This was our shining hope to have an upgrade from the classic Bachmann version of the H-16-44. https://rapidotrains.com/products/ho-scale/diesel-locomotives/ho-scale-f-m-h16-44

Pullman-Standard 5077 cu.ft. Single-Door Boxcar

Here is something a little different for you Chessie era B&O modelers, and Mike Shylanski has a review of this car elsewhere in this issue. Here is a summary of part of the prototype story: The **Pickens Railroad** is a short line that operated in the South Carolina Upstate region for more than a century, beginning in the 1890s. The railroad purchased a number of pre-fab boxcar kits from both Berwick Forge and Fabricating (BFF) and Pullman Standard to be assembled in Golden Tye's Pickens, SC shops. Between May and July, 1976, Golden Tye (GT) assembled 81 kits and numbered them as the PICK 55500-55580 series. In 1985, Chessie System took possession of 30 of those 1976-built kit cars, refurbished them and numbered them in the B&O 401170-401199 series.
Model Features include:

- Type 2 body with 10 side posts (5 on each side of the 10-foot centered door) with all 10 side posts being fabricated from hat section channels

- Type 5 side sill (no jack pads, Golden Tye rivet placement)
- Pullman's proprietary 15-panel "bow-tie" roof
- Pullman's N4/5 "sine-wave" corrugated ends (with narrow top corrugation)
- Pullman's embossed-panel sliding doors with NRUC logo plate
- Type 3 stirrup steps
- Rigid (non-cushioned) underframe
- Horizontal-lever brake gear
- Hennessy "Slide-Well" power-assist door opener with type 3 hand wheel
- NARCorp high performance/low friction 70-ton ASF Ride Control trucks with 33" diameter metal wheels
- Genuine Kadee #158 semi-scale magnetic couplers in semi-scale coupler boxes
- Chessie System blue and yellow B&O livery with blank NRUC logo panel on the door and Chessie kitten logo to the right

This detailed replica of Pullman Standard's 5077 cubic-foot single door boxcar (Lot 9831) has been meticulously researched and designed by North American Railcar. The plastic body shell will have accurate details in plastic, wire and etched metal.https://www.pwrs.ca/view_product.php?ProductID=253940

Athearn HO Electro-Motive Division GP40-2 and GP40-2L diesel locomotives

GP40-2: Chessie System (with Chesapeake & Ohio reporting marks) and Baltimore & Ohio marks with a CSX number in one number each, with B&O marks and CSX patchout in two numbers each. Models have railroad-specific details, and LED lighting. DC (with 21 pin plug) and DCC sound options available, athearn.com

Atlas N scale EMD GP40 diesel locomotive

This is in Atlas' Master Line. The GP40 has LED headlights and Accumate couplers. Direct-current models and a version with an ESU LokSound Digital Command Control decoder are offered. atlasrr.com

ADDITIONAL NEW PRODUCTS
COMPILED BY JOHN TEICHMOELLER

Evans Covered Hopper in HO from Walthers
Now comes an Evans 4780 cu. ft. covered hopper lettered for Archer Daniels Midland with the "molecule" logo and carbody comes in blue, gray or yellow. No, this is not a B&O car but it might belong in your eastbound grain trains headed for the ADM grain elevator at Locust Point. even if you only model it as staging. According to the September 2021 *Model Railroad News*, this car is in the Walthers "Proto" series which means finer details including etched roofwalk and end crossover platforms and what appear to be at least some (the lower), but not all the ladder/grabs are wire grabs. You still need to add the cut levers yourself.

F-7 in G-scale (1:29) by USA Trains
The September 2021 *Model Railroad News* is showing a PRR A-B set. Enhanced details including metal screens. Sound is an option. Twin motors in each unit. Operating smoke is even offered. B&O Blue and Gray scheme is offered but not illustrated. Usatrains.com

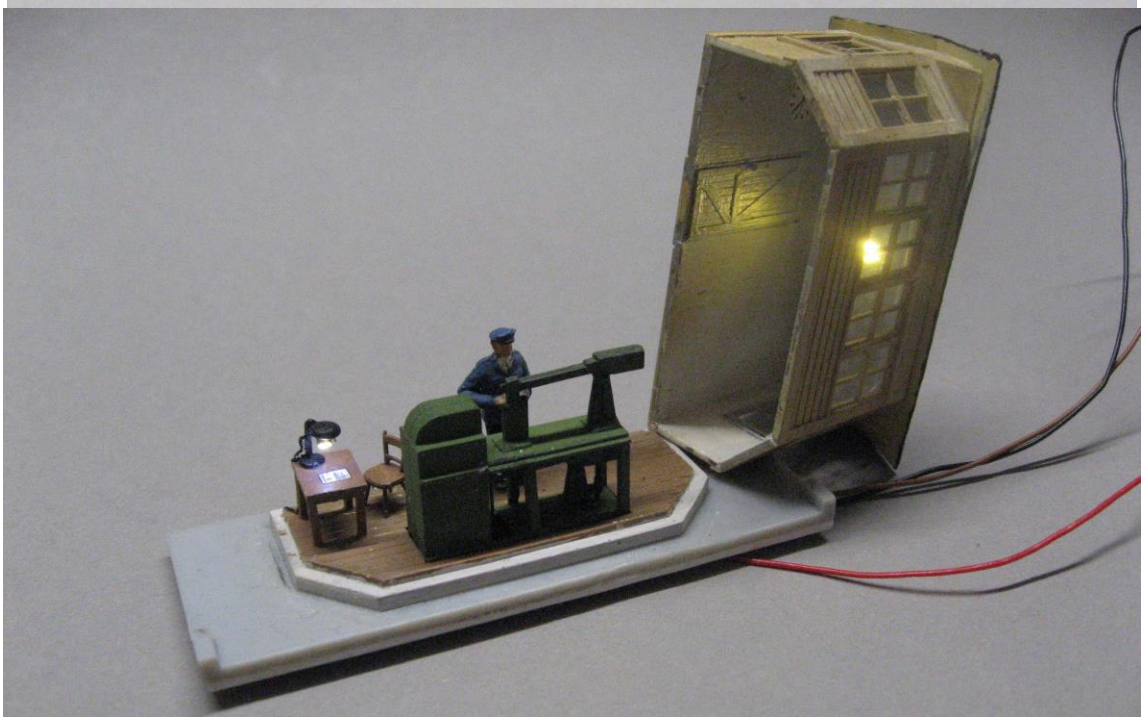
Alco S-4 in N and HO from Atlas
This is the 1000hp switcher with the AAR-style side frames. The February 2021 *Model Railroad News* claims this model has never been done in N scale by Atlas. Available with or without sound. Of note in the *MRN* blurb is that the N scale version will offer two cab styles and two radiator styles and separately applied cut levers and air hoses and fine scale handrails with a die-cast body. The HO version has been done in the past but now will have new tooling. Atlas did a nice HO version of the S-2 some years ago. I bought one lettered SIRT with sound. It had wire grabs, cut levers and fine railing, vast detailing improvements over earlier versions, but it's not clear how this newest offering differs. Artwork shows the B&O unit in the late, wide sill stripe /no hood stripe color scheme. These units should be winners in either scale—Atlas diesels are my best runners. My only regret is that Atlas has not joined the "keep alive" bandwagon yet; however, you don't need or even want a big keep-alive unit. My experience is that a second or two of dead running capability is all you need, and longer can be dangerous. There have been several articles published about scratch-building your own "mini-keep alive" that has a much is smaller footprint than the commercial units but that's beyond my pay grade, and I can't get my electronics-oriented friends interested.

Greenville 86' High Cube Boxcar from Tangent.
This 4-door car was originally issued in September 2020 and Tangent's new release includes a B&O version with large yellow Capitol Dome. Gorgeous… tangentmodels.com

FROM THE READERS
COMPILED BY JOHN TEICHMOELLER

Track Scale
I liked the article on the track scale in *B&O Modeler No. 53*. Having a functional track scale is also on my list of long-term projects. I have started to experiment and decided to use a kitchen scale as a base. It gives me the actual weight of a car in grams or ounces (depending on the setting). Meanwhile I started some time ago with the approaches and the scale house. As you can see, I added some extra details and illumination.

I am still hoping that someone will unearth a diagram for one of the Curtis Bay "mules."
Regards,
Thomas Goernig



The Walthers scale house kit provides for 2 slightly different scale houses. The interior detail is nice, too but you really can't see it unless you provide some illumination like this.

Slightly modified Walther's scale house at the weigh-in-motion scale, Orange Grove yard of Principio Steel's open hearth melt shop. The scale test car is parked in its normal spot and is a repurposed Berg patent "cauldron-style" hot metal car. Note how you can't see the nice interior Walthers provides for the scale house unless you illuminate it. The car itself dates back to the early 1900s. (The model is a resin kit from Peach Creek shops.) B&O services the scale for the steel company. Models and photo by John Teichmoeller.

MODELING A RUSTY LOOKING B&O HOPPER CAR

BY MIKE SHYLANSKI

PHOTOS BY AUTHOR UNLESS OTHERWISE SPECIFIED.

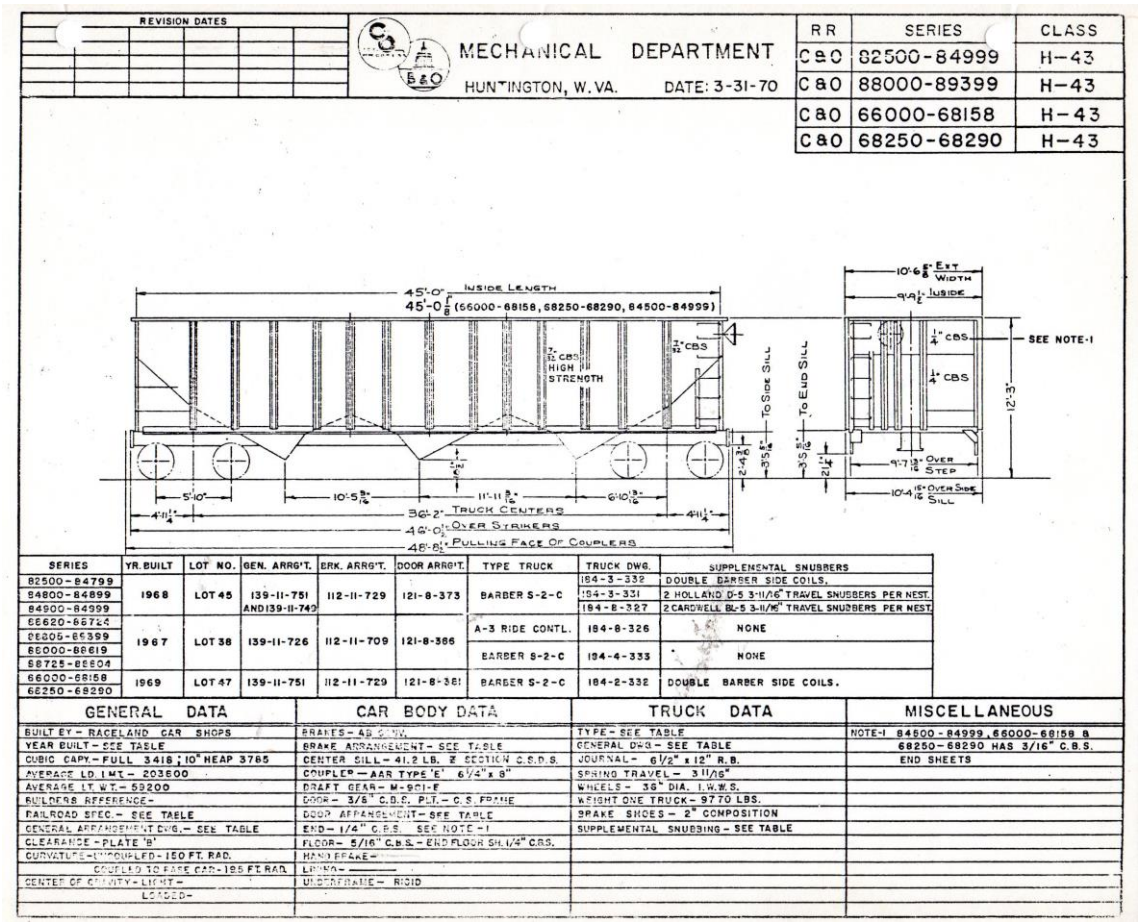
The Prototype

Several years ago, I was going through the rolling stock slides at the Maryland Rail Heritage Library at the National Railroad Historical Society (NRHS) chapter in Baltimore and found a surprising image. NRHS member William Parks had taken a shot of a lowly B&O coal hopper in the latter part of the 1980s. B&O and its partners in the Chessie System had thousands of these. Ho hum. When I looked more carefully at the Parks slide of B&O 66026, however, I was struck by just how rusty the loaded, in-service hopper car looked. While older B&O hoppers had often had rust issues requiring steel panels to be replaced, you seldom saw a car that was almost completely brown.

A check on the history of the car revealed that in 1971 B&O bought around 800 cars from the C&O H-43 series of cars, C&O 66000-66999. The cars had been built by Raceland Car Shop in 1969 from Bethlehem parts and it appears that several hundred were built with one of the types of "weathering" steels as something of an experiment. This is the steel that is intended to rust without the structure rusting away. You may have seen it used on certain highway bridges and roadside guard rails. Perhaps the most well-known steel of this type is called Cor-Ten which is proprietary to United States Steel. The diagram below is annotated to show the side sheets specified as 7/32" thick CBS High Strength (copper bearing steel). Use of steels like this was touted to the railroads as allowing the use of thinner steel (e.g. typical side sheets were ¼" thick). Whether or not they used actual Cor-Ten for these cars, we know for certain that it acted similar to Cor-Ten in its rusting property. Photographs of C&O cars shortly after they were built show that parts of the cars began to turn brown almost immediately, and it appears that the railroad had some difficulty keeping painted-on lettering on the cars. In some cases, the ribs of the car rusted before the side panels.

When B&O acquired the cars, they would have been patch painted with B&O reporting marks at first. Later most of the cars would have received Chessie System black paint with yellow lettering. However, the Parks photo suggests that at least one car did not get the beautification treatment. It would appear that there is nothing wrong with B&O 66026 as shown in the photo. It simply has turned the expected rust color with the railroad putting black patches on the car to bear the lettering required.

This shot by William Parks taken in Baltimore in probably July 1986 shows a very brown hopper of a modern Bethlehem design. B&O had hundreds and hundreds of these, but they were usually painted black. If you compare the color of the coal and the black consolidated data stencil with the car body color, you can see that this car is close to being a rusty brown. Note the chalk marks by someone named Jake referring to "clean coal." Courtesy Baltimore Chapter NRHS.



REVISION DATES

MECHANICAL DEPARTMENT
HUNTINGTON, W. VA. DATE: 3-31-70

RR	SERIES	CLASS
C&O	82500-84999	H-43
C&O	88000-89399	H-43
C&O	66000-68158	H-43
C&O	68250-68290	H-43

SERIES	YR. BUILT	LOT NO.	GEN. ARRG'T.	ERK. ARRG'T.	DOOR ARRG'T.	TYPE TRUCK	TRUCK DWG.	SUPPLEMENTAL SNUBBERS
82500-84799	1968	LOT 45	139-11-751 AND 139-11-749	112-11-729	121-8-373	BARBER S-2-C	184-3-332	DOUBLE BARBER SIDE COILS.
84800-84899							184-3-331	2 HOLLAND D-5 3-11/16" TRAVEL SNUBBERS PER NEST.
84900-84999							184-8-327	2 CARDWELL BL-5 3-11/16" TRAVEL SNUBBERS PER NEST.
88620-88724	1967	LOT 38	139-11-726	112-11-709	121-8-366	A-3 RIDE CONTL.	184-8-326	NONE
88805-89399								
66000-68619						BARBER S-2-C	184-4-333	NONE
68725-68804								
66000-68158	1969	LOT 47	139-11-751	112-11-729	121-8-381	BARBER S-2-C	184-2-332	DOUBLE BARBER SIDE COILS.
68250-68290								

GENERAL DATA	CAR BODY DATA	TRUCK DATA	MISCELLANEOUS
BUILT BY - RACELAND CAR SHOPS	BRAKES - 48 C.I.V.	TYPE - SEE TABLE	NOTE-1 84600-84999, 66000-68158 &
YEAR BUILT - SEE TABLE	BRAKE ARRANGEMENT - SEE TABLE	GENERAL DRG - SEE TABLE	68250-68290 HAS 3/16" C.B.S.
CUBIC CAPY. - FULL 3418; 10" HEAP 3785	CENTER SILL - 41.2 LB. Z SECTION C.B.S.	JOURNAL - 6 1/2" x 12" R.B.	END SHEETS
AVERAGE LD. LMT. - 203600	COUPLER - AAR TYPE 'E' 6 1/4" x 8"	SPRING TRAVEL - 3 11/16"	
AVERAGE LT. WT. - 59200	DRAFT GEAR - M-901-F	WHEELS - 36" DIA. I.W.W.S.	
BUILDERS REFERENCE -	DOOR - 3/8" C.B.S. PLT. - C.S. FRAME	WEIGHT ONE TRUCK - 9770 LBS.	
RAILROAD SPEC. - SEE TABLE	DOOR ARRANGEMENT - SEE TABLE	BRAKE SHOES - 2" COMPOSITION	
GENERAL ARRANGEMENT DWG. - SEE TABLE	END - 1/4" C.B.S. SEE NOTE-1	SUPPLEMENTAL SNUBBING - SEE TABLE	
CLEARANCE - PLATE 'B'	FLOOR - 5/16" C.B.S. - END FLOOR SH. 1/4" C.B.S.		
CURVATURE - UNCOUPLED - 150 FT. RAD.	HAND BRAKE -		
COUPLED TO FACE CAR - 185 FT. RAD.	LINING - ———		
CENTER OF GRAVITY - LIGHT -	UNDERFRAME - RIGID		
LOADED -			

The Model

I decided to hand paint a basic black Bowser 100-ton hopper model with Microlux (made by Vallejo) 29055 Rust Paint for Brush Application with a little bit of 29005 Rust Paint for Airbrush Application mixed in to thin the paint mix. I added a touch of Microlux 29053 Rail Brown as well. Microlux/Vallejo paints are very easy to mix on a flat surface by hand. After the car body had dried, I masked off strategic spots and added black patches to the car body much as the railroad must have done on the prototype car. I used Microlux 29058 Engine Black. I often try to take some of the shine off this color by mixing in some Grimy Black. Vallejo NATO Black is a good color for painting hoppers as well. I coated the black patches with Microlux gloss and used Steel Valley hopper and other HO decals to letter the job. I made sure to add an obviously black coal load to create a nice contrast between the car sides and the coal. I am happy with results, but this will be a one-of-a-kind model, just as on the B&O (and CSX).

Here is a broadside view of the completed model. I fudged a bit on the lettering by using a Cumberland reweigh stencil. The real car appears to have been weighed at New Castle, PA in 1985.

The other side of the car has slightly different simulated patch painting and different decaled chalk marks. Note that all lettering is done over black painted patches. Also note that the brake wheel is black. You cannot really see the brake wheel in the Parks photo all that well, so I went with a black wheel, and that looks quite good with the adjacent black panel for the car end lettering.

Homemade coal loads are not hard to make and can really improve the look of a model. In this case larger coal is represented, not as common on railroads of the 1980s but such loads are documented in some photos. Note the simulated routing card on the lower left carbody. Bowser does not include these, but almost all B&O hoppers had them. The "card" is a bit of white decal.

Did these cars serve Chessie and CSX as well as other cars made with more conventional steel? It would appear so. Several cars repainted into CSX black can be found on-line. Just as some people are uncomfortable with rusty looking HTLA steel bridges on highways, railroad customers may have mistakenly regarded rusty HTLA hoppers as neglected cars. In the end, the railroad may have avoided completely re-painting some of the H-43 class hoppers, but the company wanted to preserve its image thus deciding to repaint the cars.

DETAILING A B&O INTERLOCKING TOWER

BY BOB CHAPMAN

PHOTOS BY AUTHOR UNLESS OTHERWISE SPECIFIED.

In the January-February 2006 issue of *B&O Modeler*, Greg LaRocca presented a creative solution for kitbashing a B&O interlocking tower from a pair of Walthers interlocking tower kits, resulting in a fine and easily-built model of B&O's distinctive tower architecture. I'm indebted to Greg for his inspiration and trailblazing article, which we'll draw heavily from -- thus the word "Detailing" in the title.

My tower will be a foreground model on the layout, and as the saying goes, a foreground model represents all the models placed behind it, justifying some further detailing. We'll particularly focus our efforts on the lower wainscoting, fish-scale shingled waist panel, stairway, and a new roof.

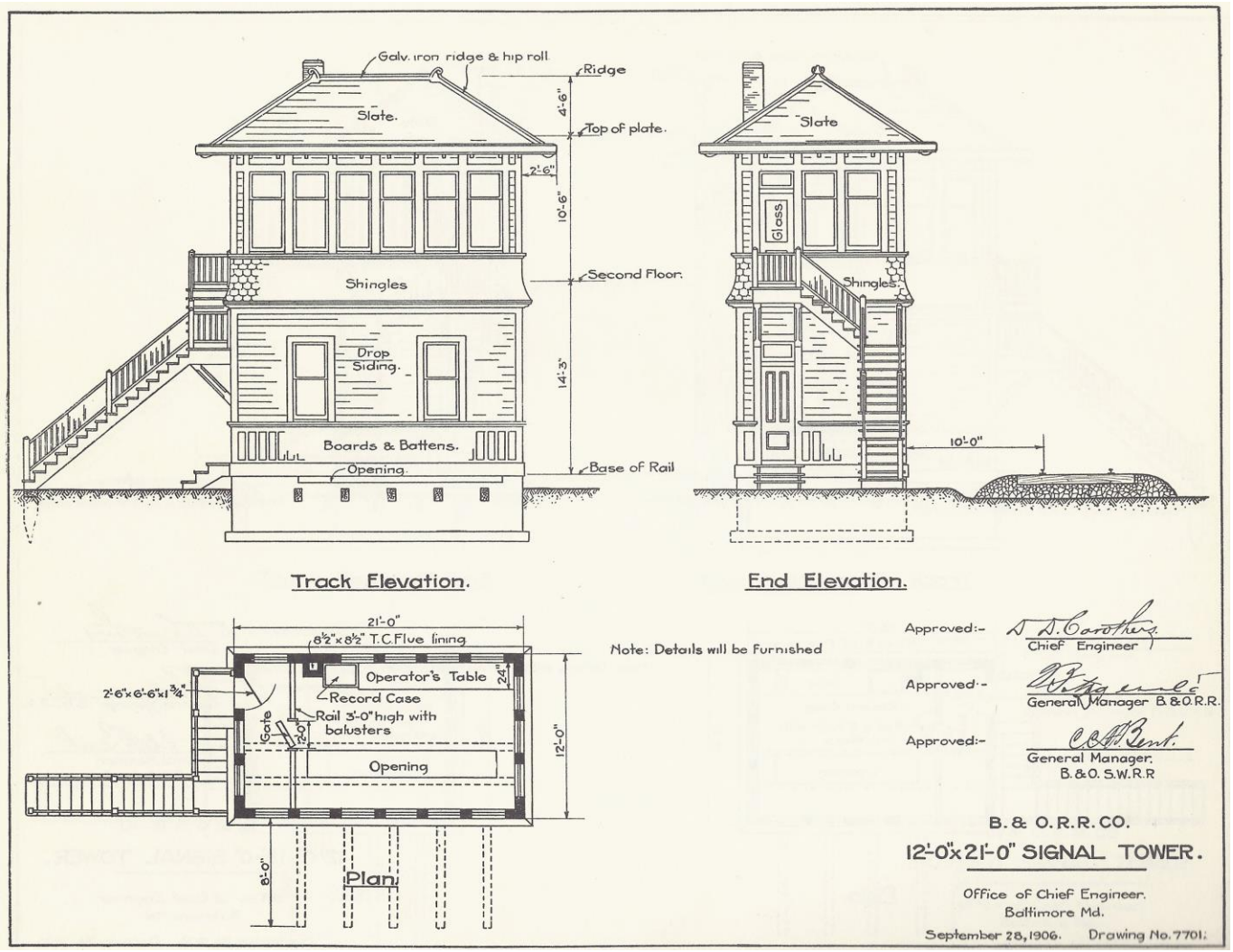
The Prototype

In 1907, B&O compiled a file of standard structure drawings. Included were suggested standard drawings for depots, freight houses, signal (interlocking) towers, and a variety of small structures such as section tool houses, scale houses and a fire hose house. It is not known whether or how these "standards" were enforced, but with the passage of time, it is clear that many variations were built, ranging from simple modifications of the basic design (including "mirror images") to total disregard for the suggested design and architecture.

At the same time, the architecture of these standard designs was quite attractive reflecting the thoughtful input from B&O's architects, going well beyond the simple functional requirements of the buildings. B&O's architects often drew from Victorian architecture elements, such as slate hip roofs with galvanized iron ridge rails, fish-scale shingled waist panels, and decorative framing elements. Reprints of the standard drawings are available from the Company Store and seem to continue to inspire modelers and occasionally even manufacturers. Thus, these standard designs offer an attractive option for B&O modelers wanting an appealing and interesting conversation piece for their layouts.

The standard interlocking towers came in seven (count 'em!) size options – 12x12, 12x15, 12x18, 12x21, 12x24, 15x30, and 15x33 feet, with the primary difference being the number of second-floor windows arrayed across the front of the second story. The smaller towers might protect a simple junction, while the larger towers could accommodate a large interlocking plant supporting a complex multitrack interchange.

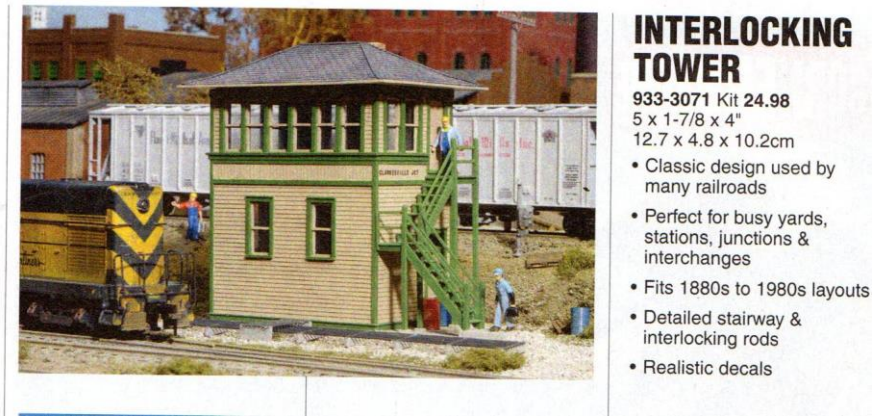
Beyond that, the towers were built or modified with extensions (usually added at the rear) to accommodate such options as a privy or Spartan living quarters for the operator, depending on the requirements of the location. In some cases, the changes were maintenance-driven, especially noticeable in differing treatment of roof shingling, eaves, and soffits. Early towers were fitted with hand-thrown levers mechanically connected to long stretches of pipe, cranks, and levers running from the tower to the controlled switch; in later years, the levers were retained, but interfaced electrically to the switch-throw mechanisms. Modelers are well-advised to seek out photos of the specific tower that they are modeling, since it seems that no two towers were exactly alike.



B&ORR Standard Plan – 12' x 21' Signal Tower

The Walthers Model

The Walthers interlocking tower is based on a Missouri Pacific prototype; some of its features strongly resemble B&O's standard 12x21 foot, six window design, while others significantly differ.



Walthers kit No. 933-3071

In terms of basic size, the Walthers tower length is 21 feet, matching B&O's, the width is 13'6" vs. B&O's 12'0", and the height to the top of the side plate is 24'3" vs. B&O's 24'9". The Walthers roof is significantly different, with a shallower two-plane pitch than B&O's steeper constant pitch, and an overall height of 1'9" less than B&O's. The Walthers model is a mirror image of the building shown in the B&O standard design, although photos show that B&O built some of its towers to this same mirror image.

There are also detail differences between the Walthers model and the B&O plan. The Walthers model lacks the fish-scale shingled belt panel. The lower windows are placed higher on the Walthers model. The chimney is located inside the wall in the B&O structure, but externally on the Walther model. And different second-floor windows are blanked between the two prototypes.

Modelers wanting a perfect B&O model will want to find the once-available Webster Classics kit, or scratch build or track down architect Mark Bandy of Ellicott City who occasionally produces laser kits of B&O structures. In our approach here, we'll try to get as close as possible while keeping the project fun and using the Walthers kit as the starting point. Most of the steps are independent of each other, and each modeler can make his own choice on which steps to model, and which to bypass.

Building the Model

Following Greg's lead, I acquired two Walthers #3071 interlocking tower kits; two are needed to provide two six-window second story walls, and provide matching clapboard siding to blank one of the windows. The leftover window frames, staircase, and parts will likely prove a handy scrapbox source for other projects. Walthers is known to discount the kit periodically, and the kit has been on the market long enough to appear with attractive pricing at train show flea markets. Either option can make the project more affordable.

Greg LaRocca Photograph from January-February 2006 B&O Modeler

From here, we'll match the text to a photo for each step.

Photo 1 – Blank the Window

On the rear of the building, the second window from the left is blanked with clapboard siding; on the prototype, this is where the chimney passes through the second floor. Cut a section of siding 2'6" wide by 5'3" high from one of the unused end walls from kit #2. Fit it tightly into the window opening of the six-window side of kit #2, making sure that the siding matches the siding at the ends of the side. Glue the siding section into the window opening, flush with its back.

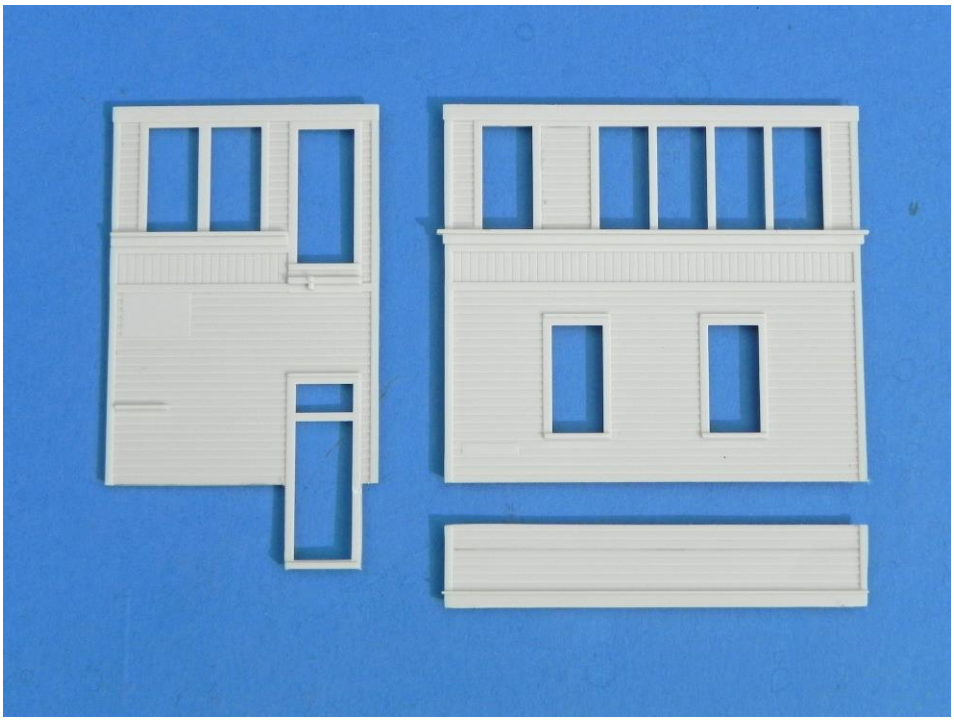


Photo 2 – Remove Bottom of Sides

On the B&O tower, the lower panel of the side is board-and-batten siding which is flush with the outside of the clapboard siding above it. With a razor saw, cut 4'0" from the bottom of all four sides (the six-window side and

ends from kit #1, and the side from kit #2 whose window we just blanked); cut around the lower door frame on the end, leaving it in place.

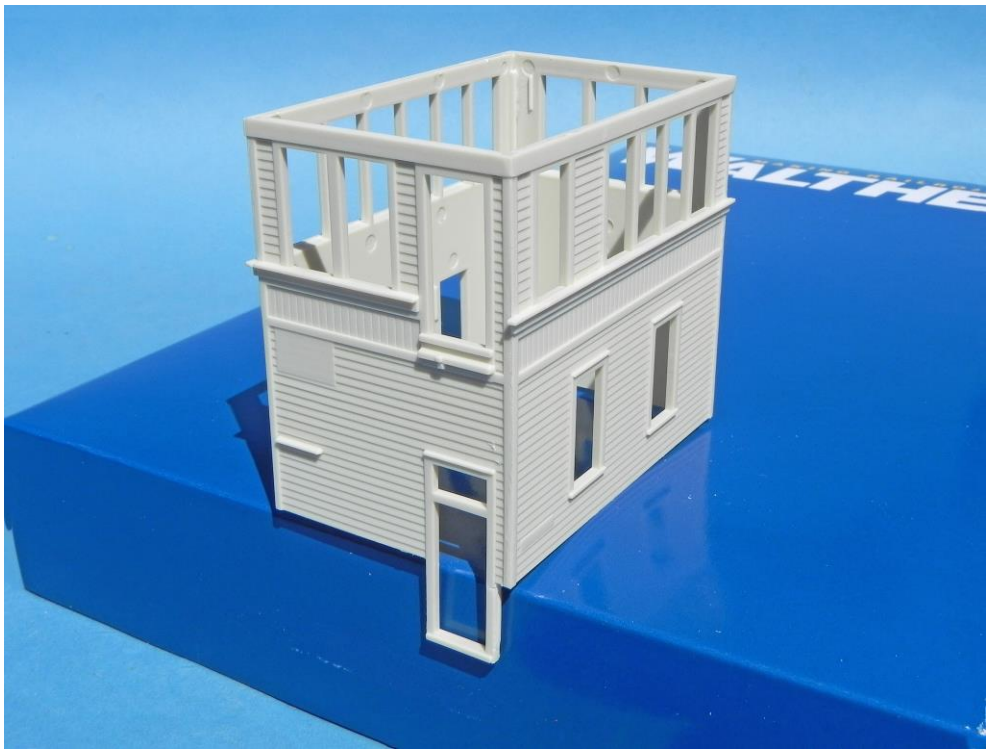


Photo 3 – Assemble the Building

Glue the ends to the front side (six window side from kit #1); the side with the doors goes to the right. Glue the rear side (side with blanked window from kit #2) to the two ends. As you go, be sure the building is square, the parts are aligned, and there are no gaps in the corners.

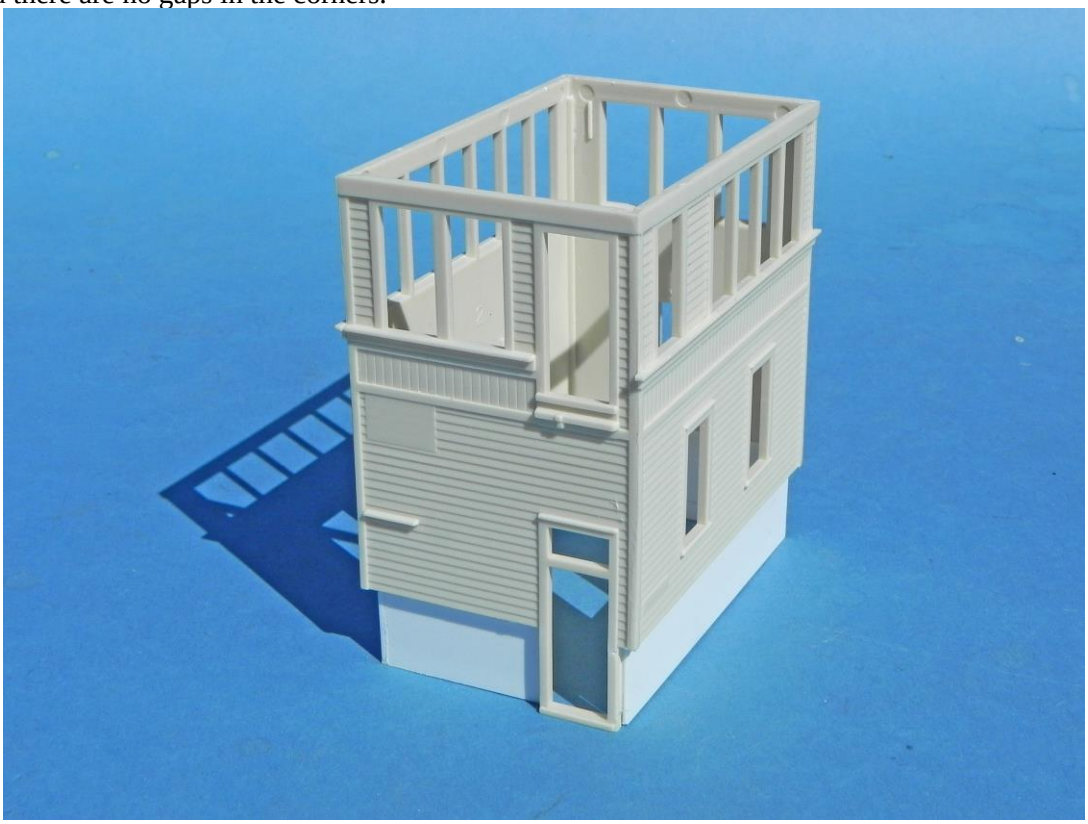


Photo 4 – Add the Lower Sub-Walls

Sub-walls at the bottom of the building will provide a base for the belt rail trim and battens in the lower wall panel. Cut lengths of .020” styrene sheet 5’0” to fit snugly inside the building walls. On the end, leave an appropriate gap at the door frame for later installation of the door. Glue the sub-wall tops inside the walls, overlapping 1’0”. Sand the bottom of the sub-walls smooth and level; a sheet of 180-grit wet-dry sandpaper on a flat surface such as a pane of glass works well for this.

Photo 5 – Add Belt Rails

A decorative belt rail molding divides the board-and-batten panel from the upper clapboard siding. The top board of the molding is cut from .020” x .100” Evergreen styrene strip, and the lower board from .020” x .080” strip. Glue them on edge to the sub-wall, butting against the bottom of the clapboard siding. To properly space the board-and-batten siding which we will add in the next step, glue .020” x .100” styrene strip shims to the sub-wall below the belt rail and at the wall’s bottom.

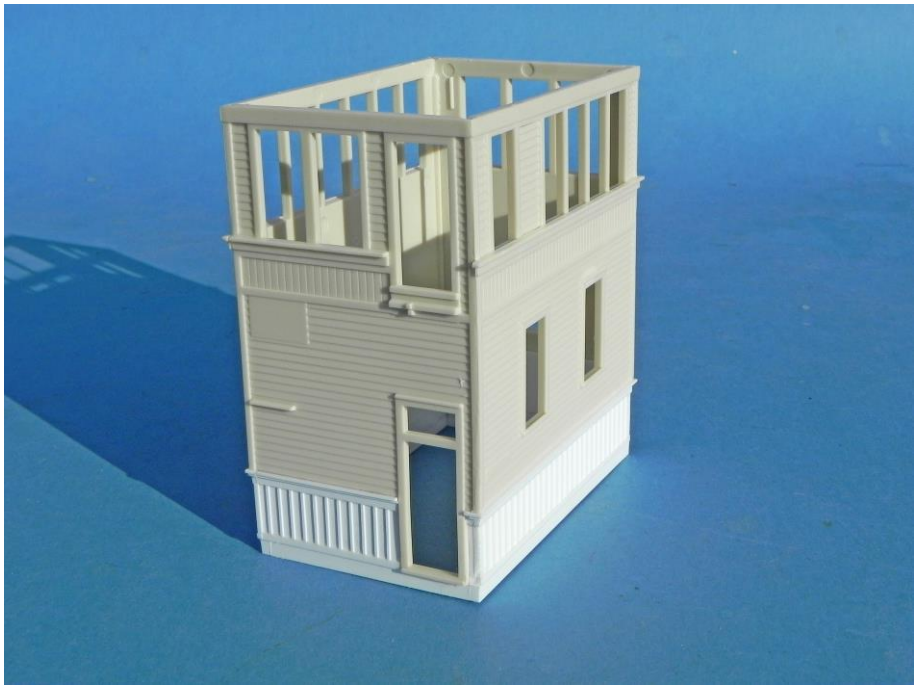
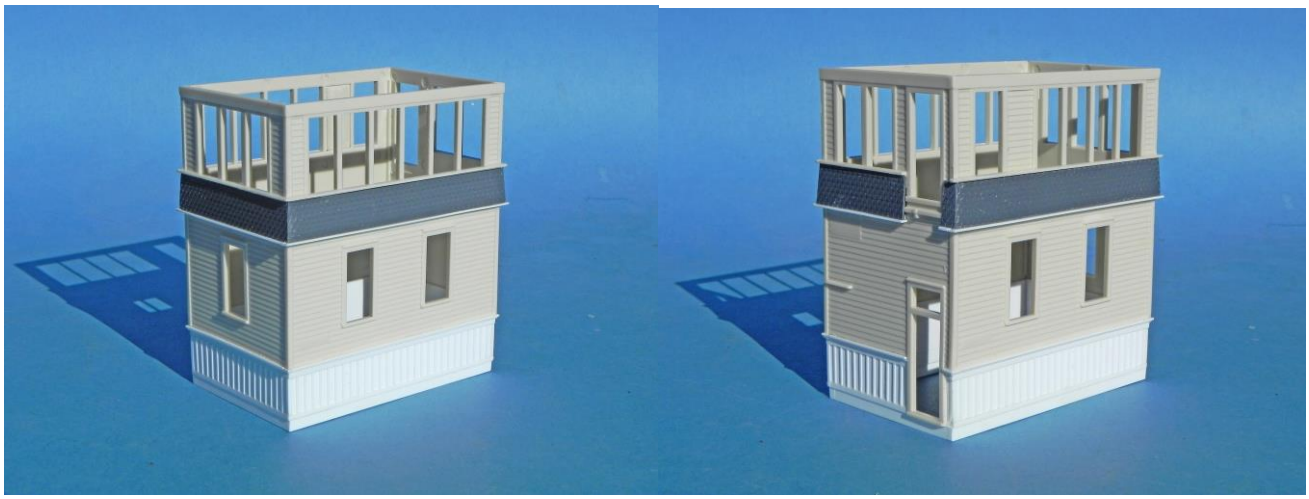


Photo 6 – Add Board and Batten Siding

Below the belt rail and above the board-and-batten siding is a horizontal trim piece; cut this from .040” x .060” strip and glue it in place. The board-and-batten siding is Evergreen #4543 .040” thick siding with .100” batten spacing; cut this 2’10” wide and glue it in place, leaving space at each corner for a vertical corner trim piece. Cut corner trim pieces from .060” x .060” strip and install at each corner. Similar to the top horizontal trim piece is a bottom horizontal trim piece; cut from .040” x .060” strip and glue in place. At the bottom of the side is a baseboard; cut from .060” x .125” strip and install flush with the boards represented in the board-and-batten siding. Sand the bottom of the building smooth and level.

Photo 7 – Prepare Shingled Waist Panel

For his tower, Greg used some very nice, curvable fish scale shingles from Master Creations; I was unable to locate a source for these, and substituted Grandt Line #5216 Scalloped Shingles. The Grandt Line sheets are rigid, and cannot be curved to match the gentle curve of the prototype. I liked the fine detail of the Grandt Line shingles, and was willing to live without the curved profile; if this is a problem to you, there are alternative thin-sheet shingle products available from the Walthers catalog. Note that the Grandt Line sheets almost exactly match the width of the front and back sides of the tower, requiring great care in not making them too short during the required cutting and fitting operations. Cut strips of the Grandt Line shingles 3’3” wide; make the cuts so that there are full shingles at the top and bottom of the strips. We’ll install the shingle strips so that they flare slightly outward from the sides. To achieve this, glue a .020” x .040” styrene strip to the bottom of the back of the shingle strip, file each end of the strip so that the bottom is slightly wider than the top (the resulting strip will be a trapezoid), then bevel each end of the back of the shingle strips to 45 degrees.



Photos 8 and 9 – Install the Shingled Waist Panels

The shingled panels are located on the side butting against the bottom of the molded trim piece under the windows. With a file, remove some of the siding trim board and corner trim boards so that the shingled panels will have a flat surface to seat on which is flush with the clapboard siding below it. Test fit the shingled panels to make sure that there are not gaps at their beveled corners. Glue the shingled panels to the building; a few licks of the file may be needed for a final neat fit at the corners. Below the shingled panels, glue a .020” x .080” trim piece.

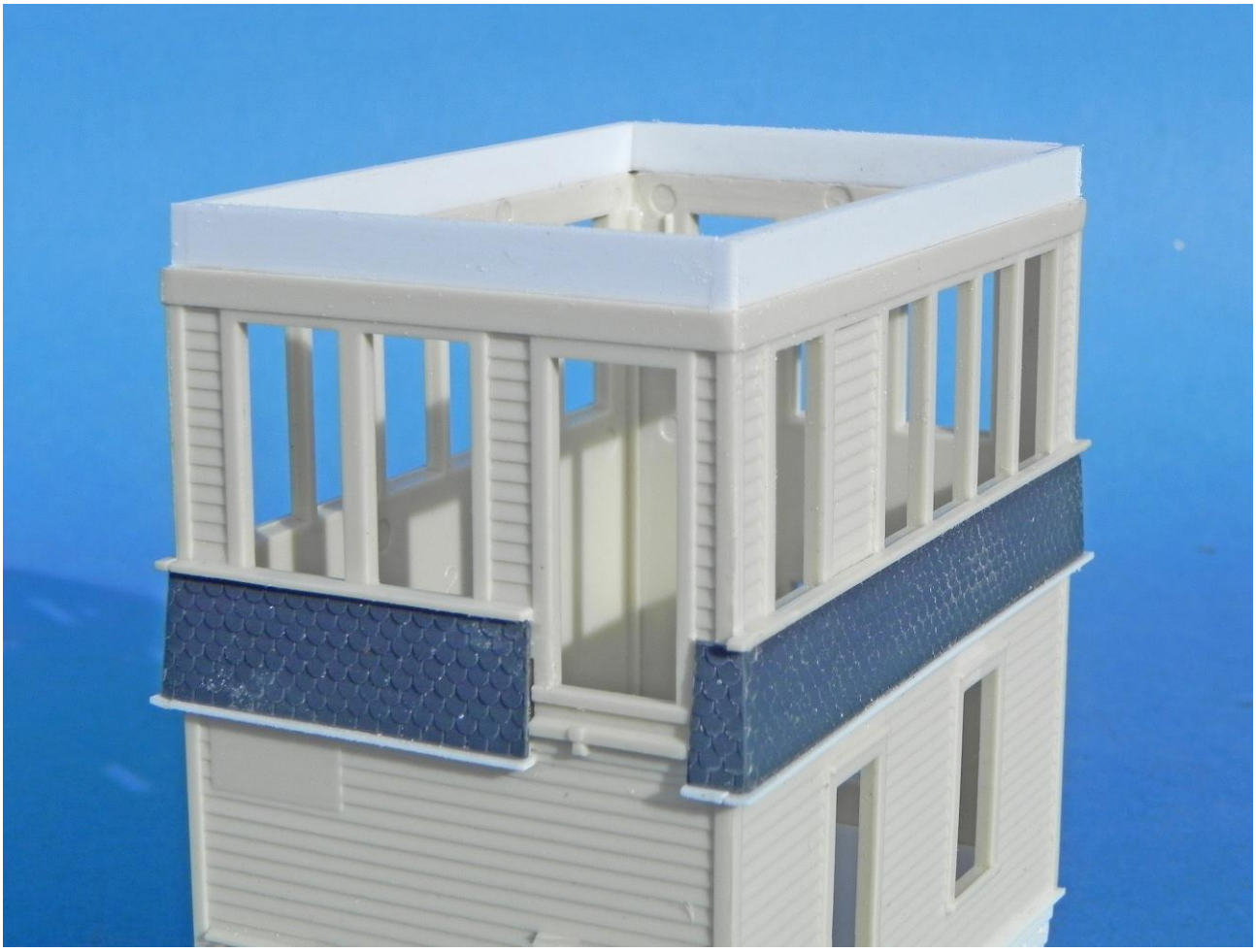


Photo 10 – Add Upper Side Extensions

High on my priority list was replacing the incorrect Walthers roof. In studying prototype photos of various B&O towers, I noted several variations in soffit treatment – some with angled exposed rafters, and others with a horizontal enclosed soffit. I liked the detail of the exposed rafters, and chose this variation for my model. This requires extending the height of the sides to accommodate the pitch of the roof's underside. Photos indicate that the prototype applied clapboard siding above the windows, but I went with a smooth surface to avoid joint seam issues with the trim applied atop it in the next step. Cut a .060" x .188" strip and glue it to the top of the side flush with the inside.

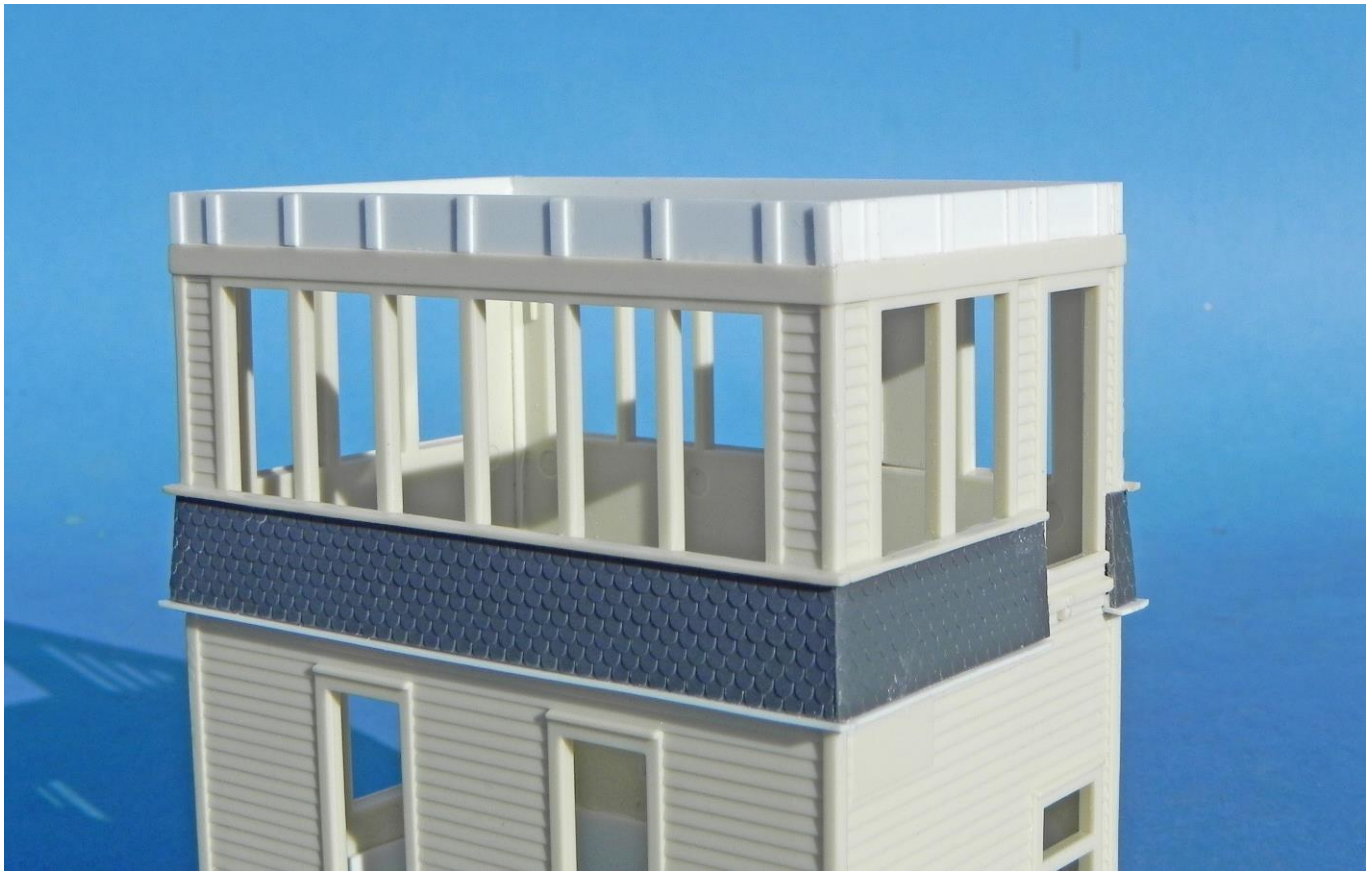


Photo 11 – Add Side Extension Detail

On many of the prototype towers is decorative vertical trim boards aligned above the window posts and at the corners. Glue .015” x .060” strips above the window posts. The corner trim is made from an L-shape formed from a .015” x .060” strip on one face and a .015” x .040” strip on the adjacent one.

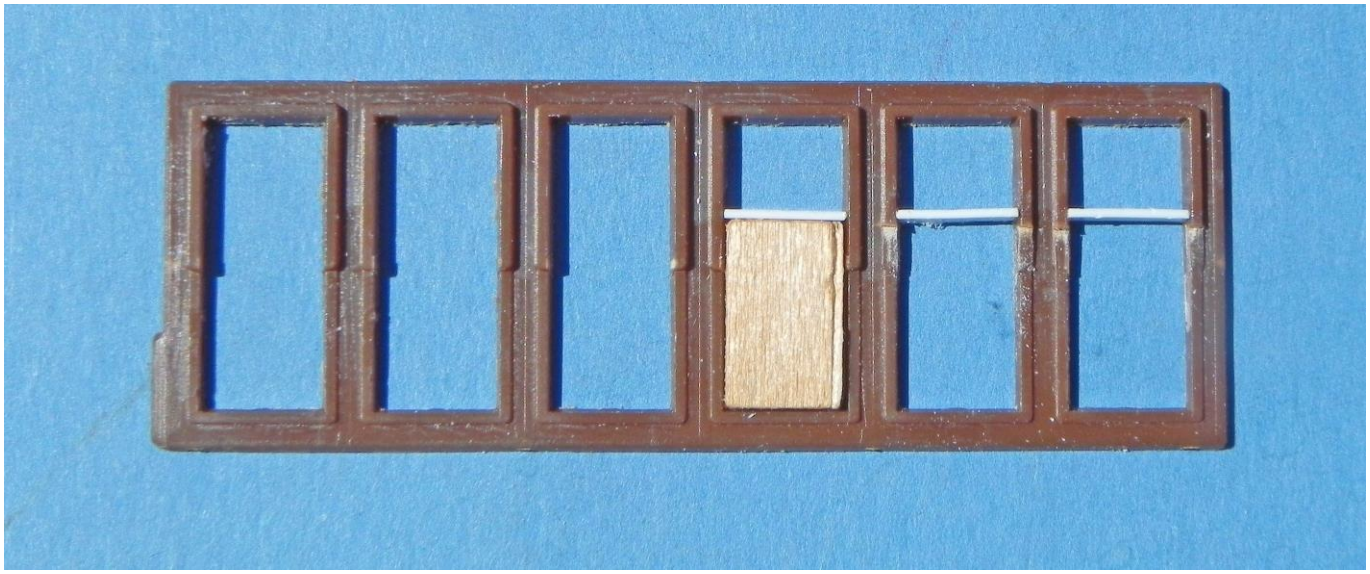


Photo 12 – Replace Window Sash Divider

In the Walthers kit, the horizontal upper window sash divider is centered in the window, while on the B&O prototype the sash divider is offset toward the top of the window. Cut away the Walthers sash dividers from the upper window castings. Replacement dividers can be more consistently placed with a spacer jig for gluing. Make a spacer jig 2’0” x 3’3”. It’s best to use a material other than styrene so that the jig won’t be glued to the window

while installing the divider; I used stripwood for my jig. Cut sash dividers from .020” x .060” styrene strip and glue them in place, positioning them with the jig. Note that the lower windows are correct as supplied.

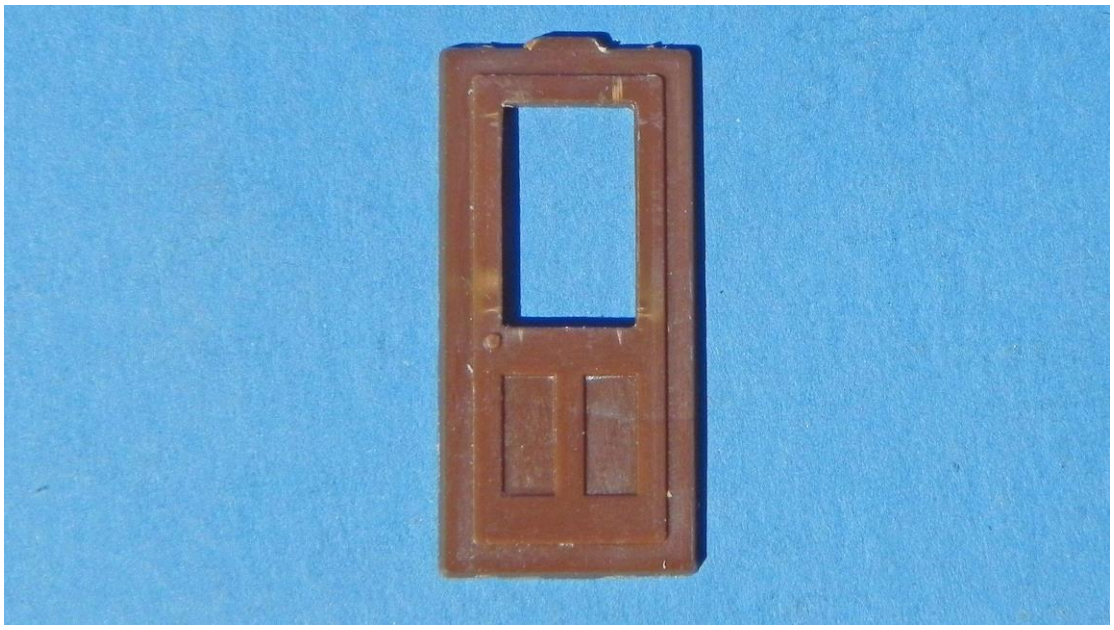


Photo 13 – Remove the Mullion from the Door
Cut the mullion from the door, leaving a single large window.

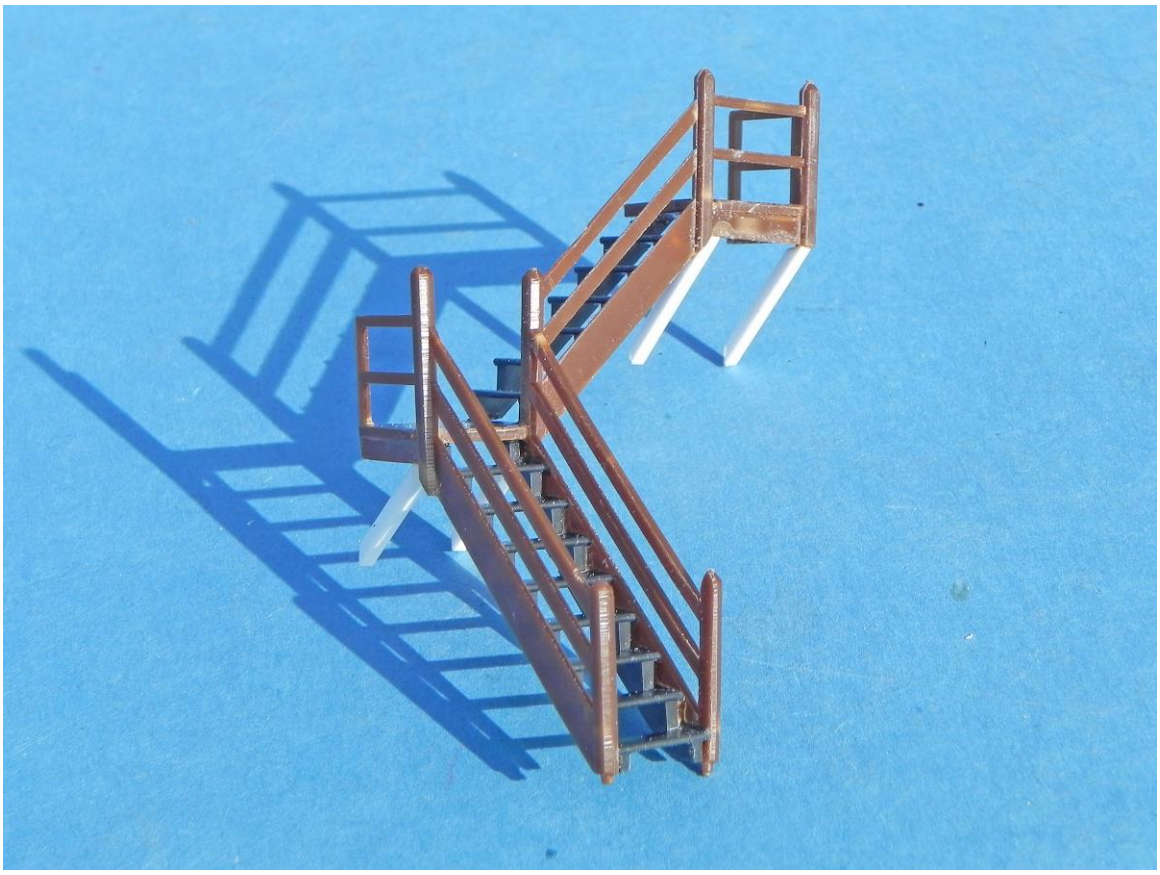


Photo 14 – Assemble the Stairway
A visible feature of the B&O prototype is open-tread steps. The Walthers stairway is closed-tread, although interestingly, the boxtop photo of the completed Walthers model shows open tread. For my stairway, I used the Walthers railing/stairway side castings, but substituted Central Valley #1602 open-tread stairs. This results in a bit

of structural overkill, since the stair treads are now supported both by the side boards and the under-tread risers, but the effect is not something I easily notice. If substituting the CV part, you'll want to file away the lips under the Walthers landing platforms to provide clearance for the CV risers, and slightly narrow the CV step castings. The B&O stairway platforms are supported by angle braces instead of long vertical posts; cut away the long posts and replace them with .060" x .060" styrene strip bracing. Test fit the steps; it may be necessary to trim the waist panel or the end of a stair tread. The kit supplies a concrete base; I elected not to use it.

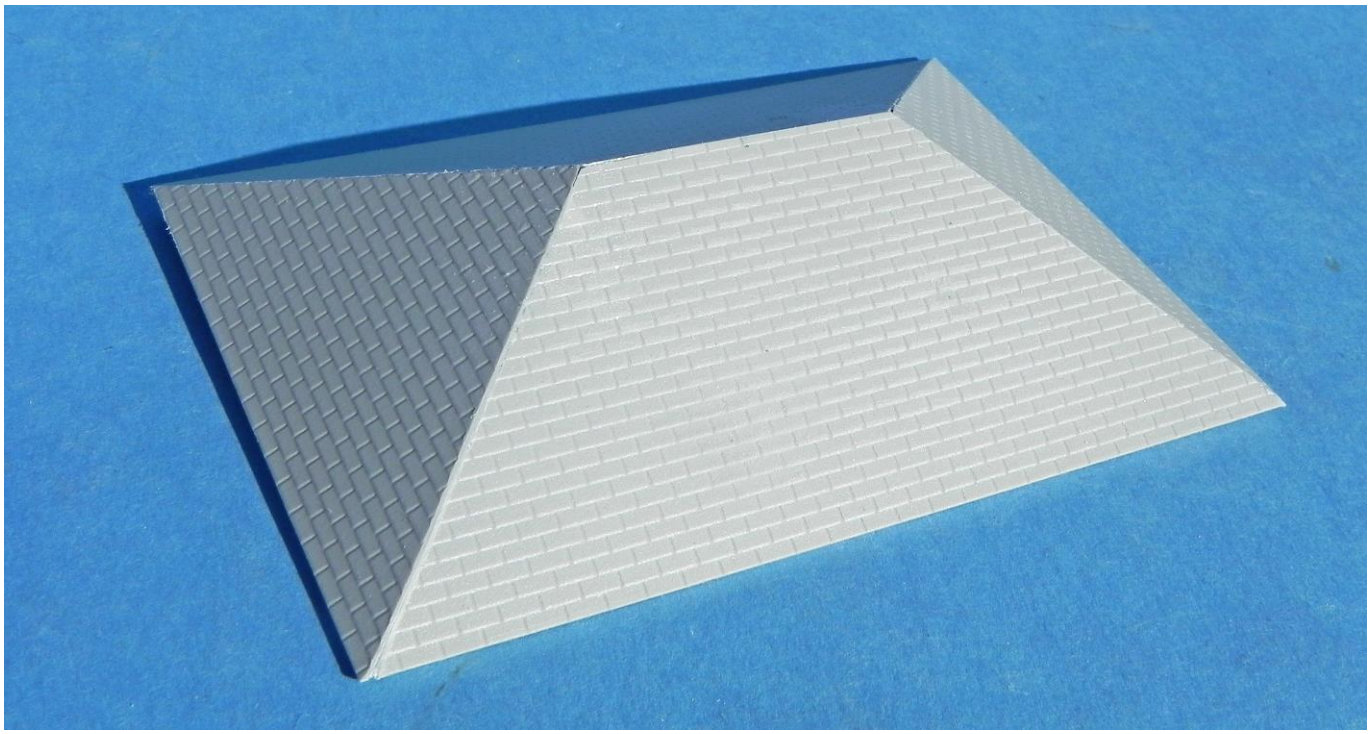


Photo 15 – Build the Roof

By the 1950s, B&O towers wore a variety of roof treatments while retaining the basic hip-style shape. The original shingles were slate, their peak covered by decorative galvanized steel ridge caps; rafters were exposed under the eaves. With the passage of time, replacement galvanized ridge caps became less decorative. On many towers, the then expensive slate shingles were replaced with common asbestos shingles, forget about that enticing galvanized trim, and in some cases the exposed rafters disappeared behind enclosed soffits. If you are modeling a specific tower, follow what is shown in photos of that tower.

I chose to model my tower pretty much as shown in the 1907 B&ORR diagram, with slate roof, simplified ridge caps, and exposed rafters. Pikestuff #1015 shingle roof approximates the look of a slate roof. Cut the sides in a trapezoid 26'0" at the base and 9'3" at the ridge, with a height of 10'9". The ends are isosceles triangles with a base of 18'6" and a height of 10'9". Bevel the edges where the sides and ends will join, and glue them to form the hip roof.

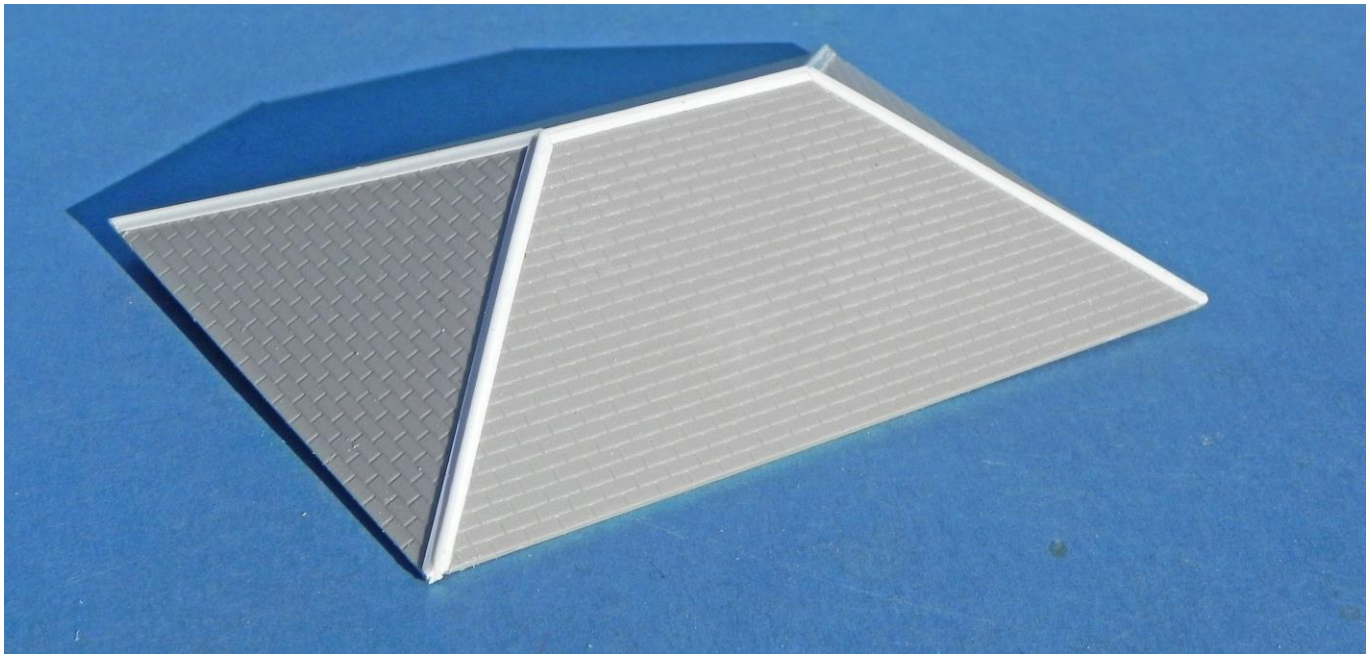


Photo 16 – Add Ridge Caps

Glue a strip of .010” x .040” styrene strip along each edge of each ridge joint, leaving a slight gap between the strips. Glue a section of .025” styrene rod resting on the slight gap to represent the raised curved ridge cap.

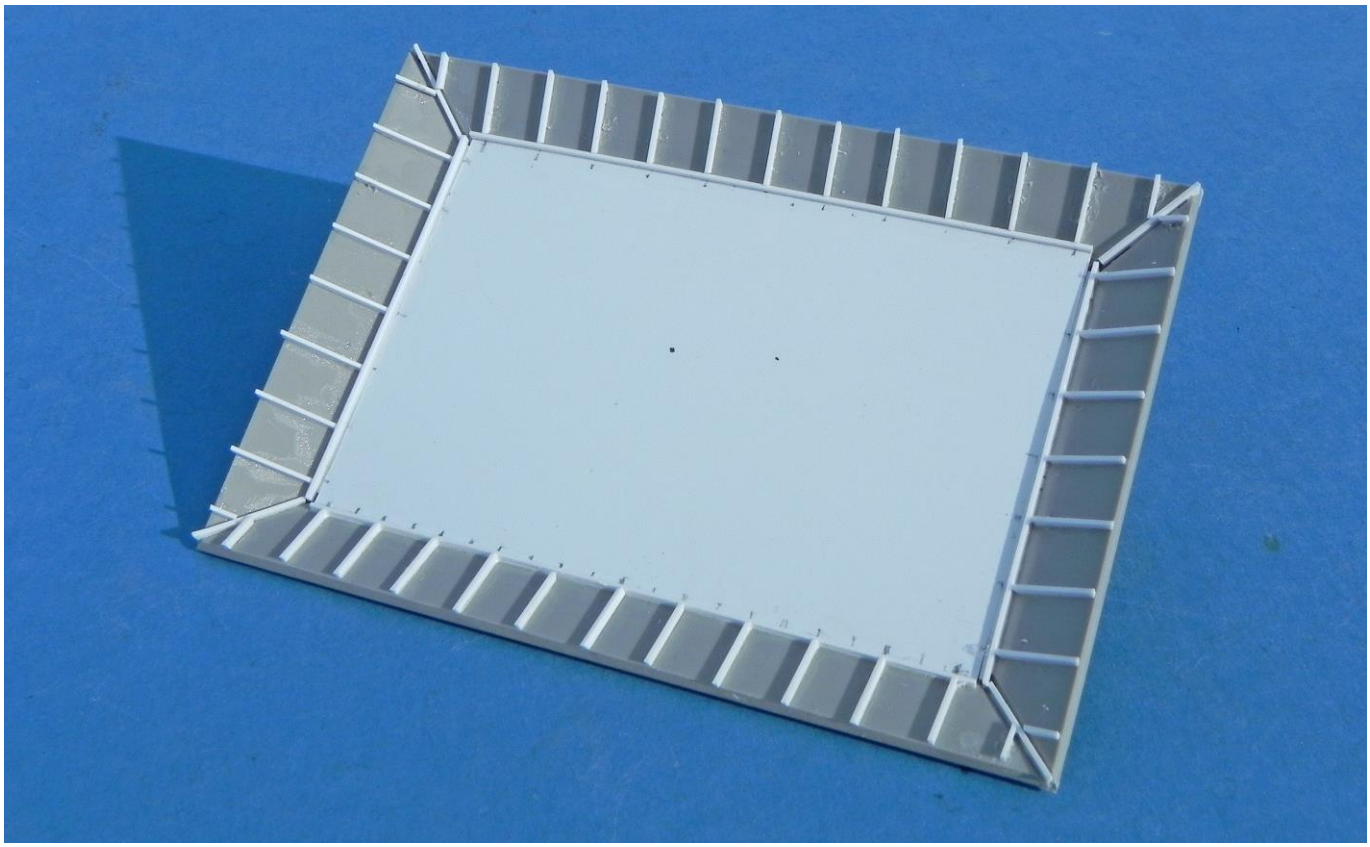


Photo 17 – Finish the Roof Underside

To assure that the removable roof will seat flat on top of the structure, I added a ceiling cut from .020” styrene sheet 21’3” x 13’9” and glued this centered on the underside of the roof. Around the outside edge of the ceiling, I added a border of .020” x .040” styrene strip to serve as a “locator” to center the ceiling on the building. Cut rafters from .020” x .040” styrene strip, with their outer ends angled at 60 degrees; a NorthWest Short Line Chopper is handy

for cutting all the rafters the same length with the correct end angle. Glue diagonal rafters at each corner, then add rafters between them at two-foot centers.

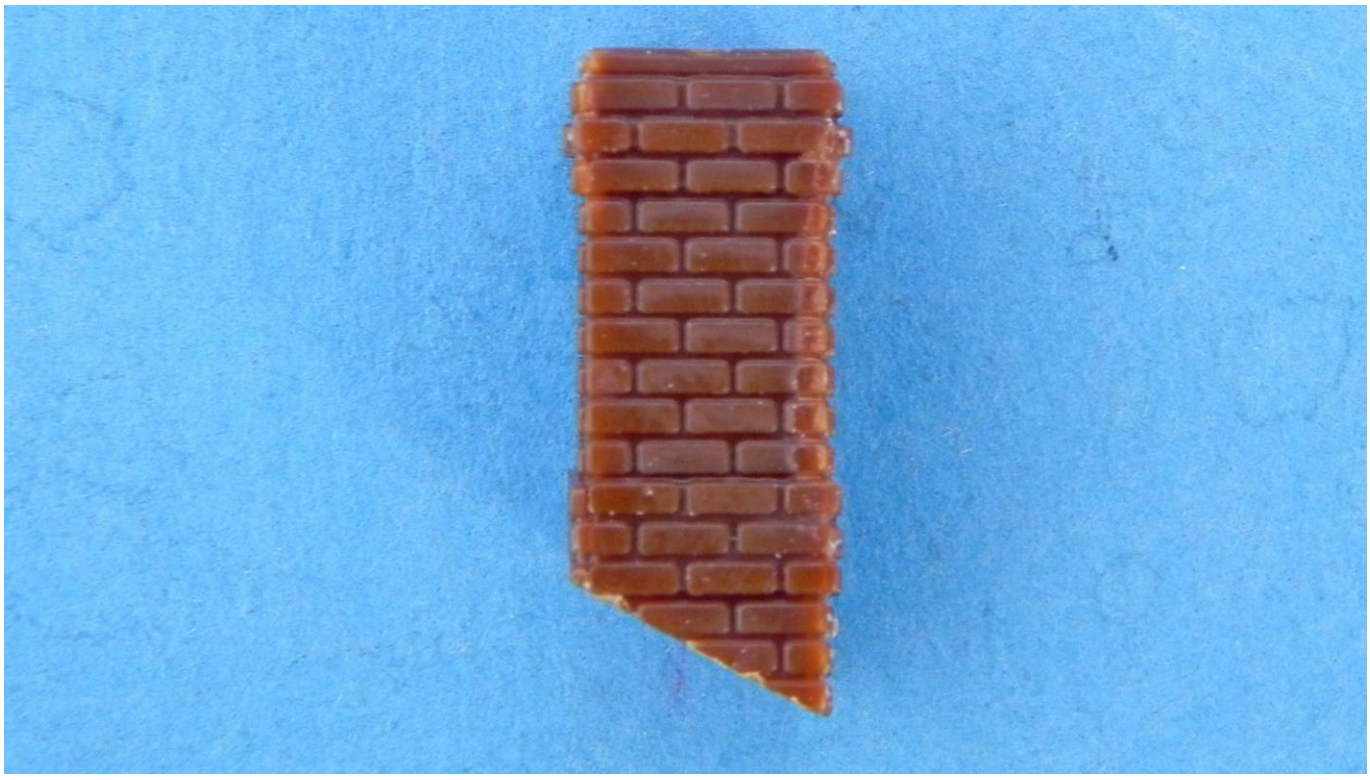


Photo 18 – Assemble the Chimney
Glue the chimney's four sides, and bevel its bottom to match the slope of the roof.

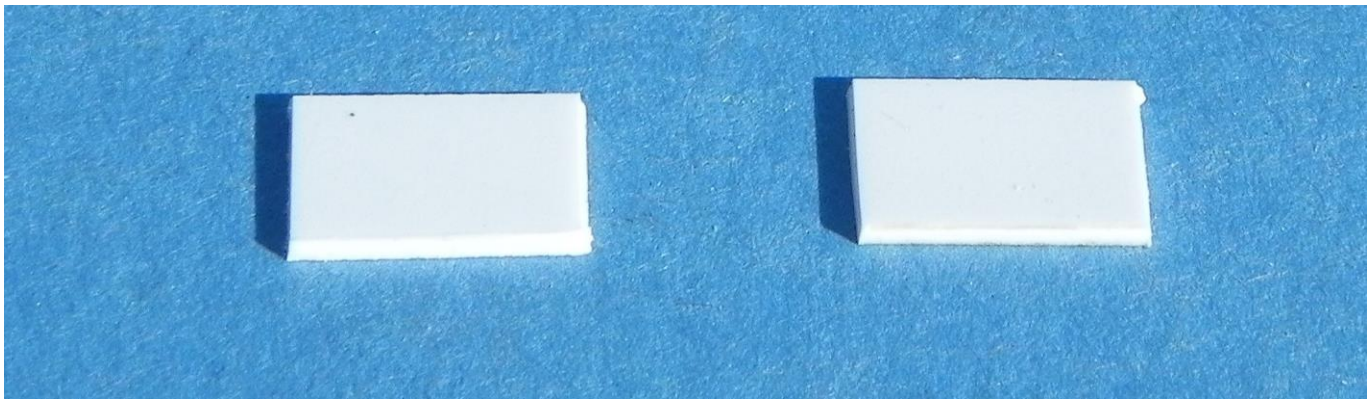


Photo 19 – Build the Order Board
The order board extends outward from the building between the lower sashes, often at the center of the side. There is often a pair of signal lamps, whose style can vary: 1) industrial-style cage lamp suspended from its top, 2) hooded lens lamps, similar to a traffic signal, or 3) similar to a standard lantern. I went with style #1, which seems more common. The order board is .020" styrene, cut 2'0" x 2'0". A black trim piece surrounds the white order board; I cut a section of .020" x .020" strip, to be added after I paint it. The lamps are 3/64" styrene rod, drilled from their end to accept .016" wire conduit. Bend the wire to a U-shape, and glue them to it; round the bottom ends of the rod with a file.

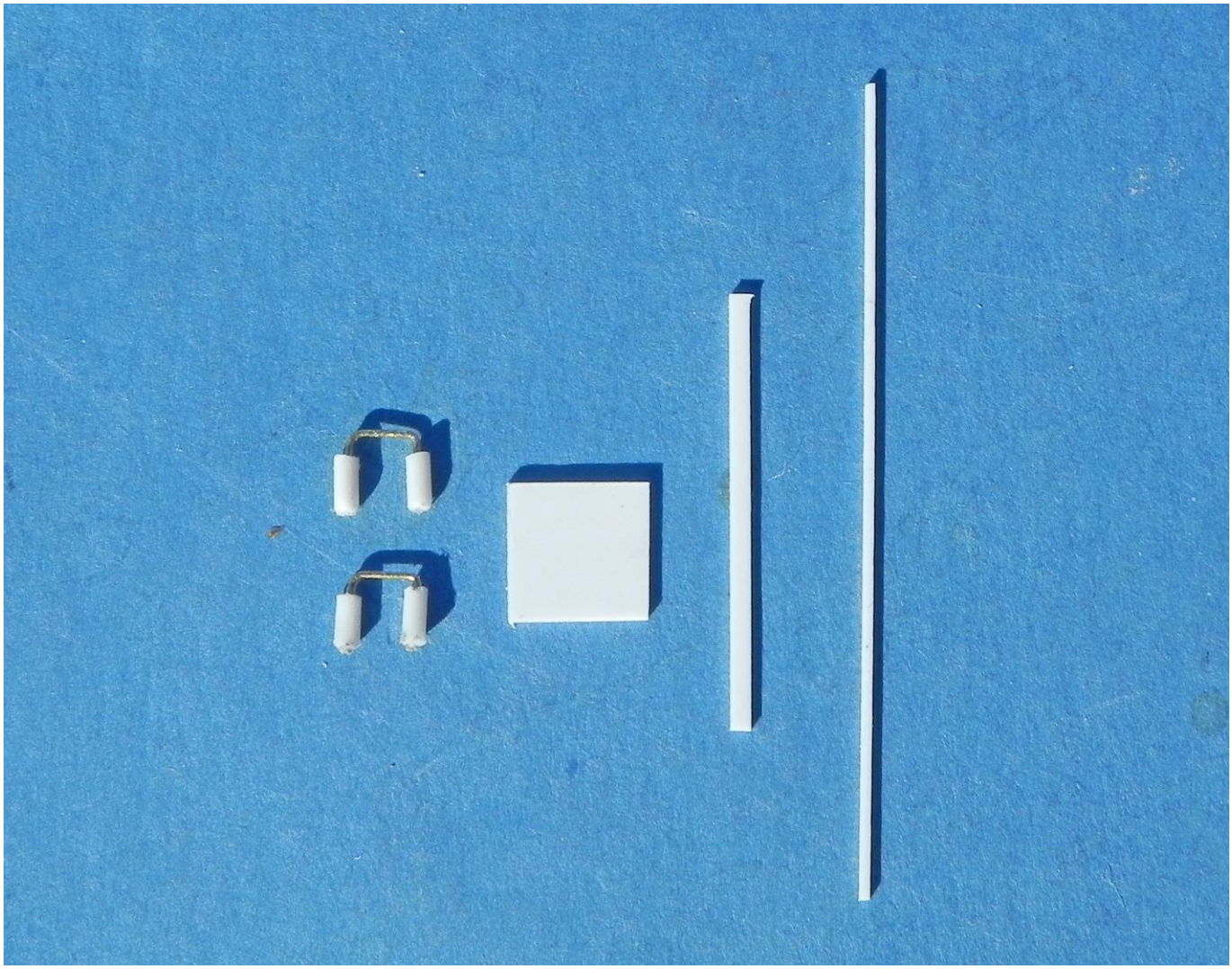


Photo 20 – Cut the Call Letter Sign

Most towers had a sign on each end in the upper sash of the end window closest to the tracks, containing one or two initials; these initials were unique for each tower within a B&O division. Cut a pair of .020” styrene sheet pieces 18” x 24”. B&O’s standard lettering for these signs is a compressed Gothic style 7” x 11”.

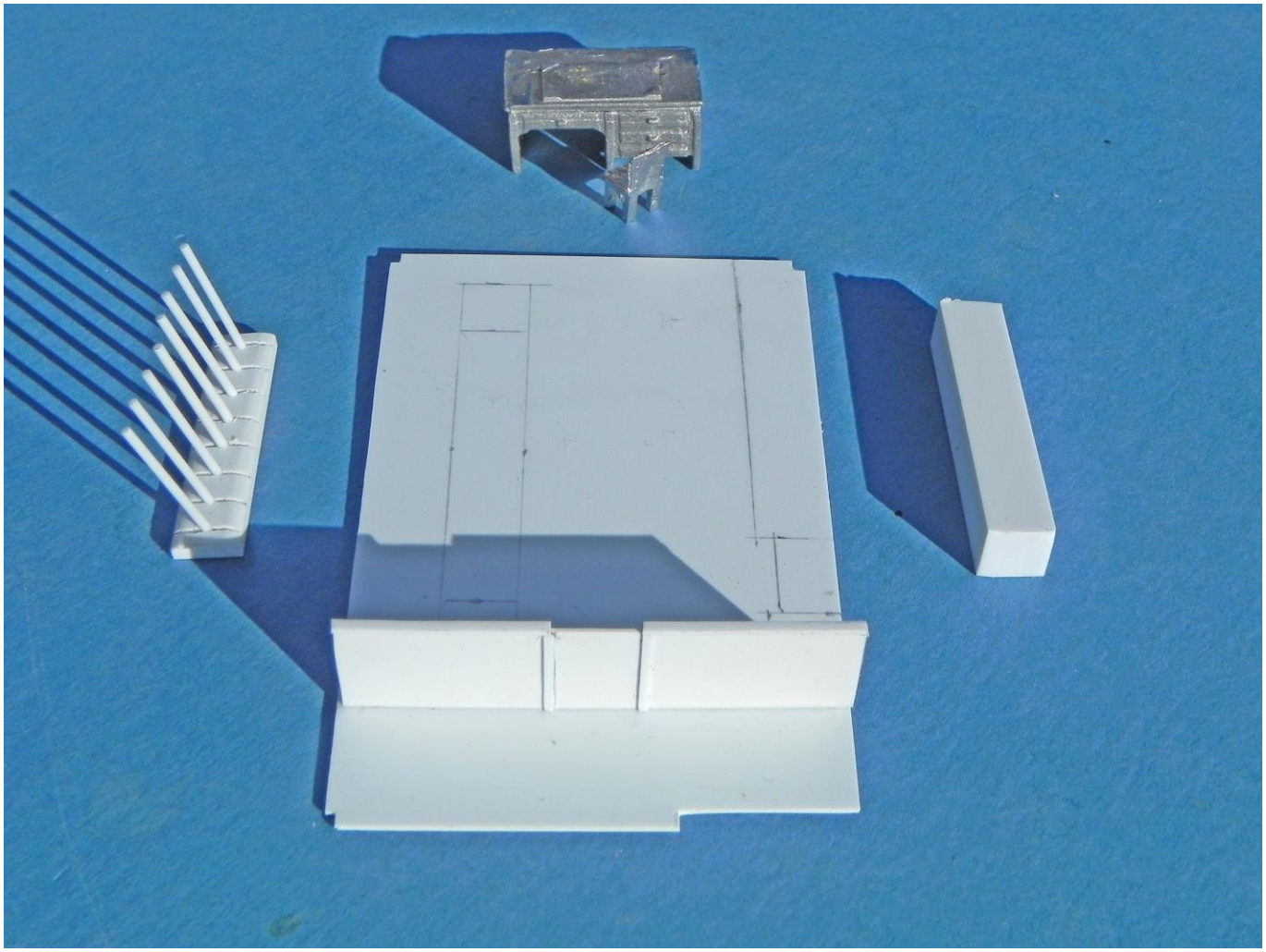


Photo 21 – Interior

Given the number of large second floor windows, to avoid the empty-room look, I semi-detailed the interior. The floor is a 12’6” x 20’0” section of .020” styrene sheet; ledges are glued to the inside walls 9’9” from their top support the floor. The interior divider railing is also .020” styrene; styrene strip forms the railing’s top and outlines the gate. The chimney is .250” x .250” styrene strip; the desk and chair are commercial parts from the scrapbox. The interlocking plant base is .100” x .250” styrene strip, with top rounded. Levers are .032” styrene rod.

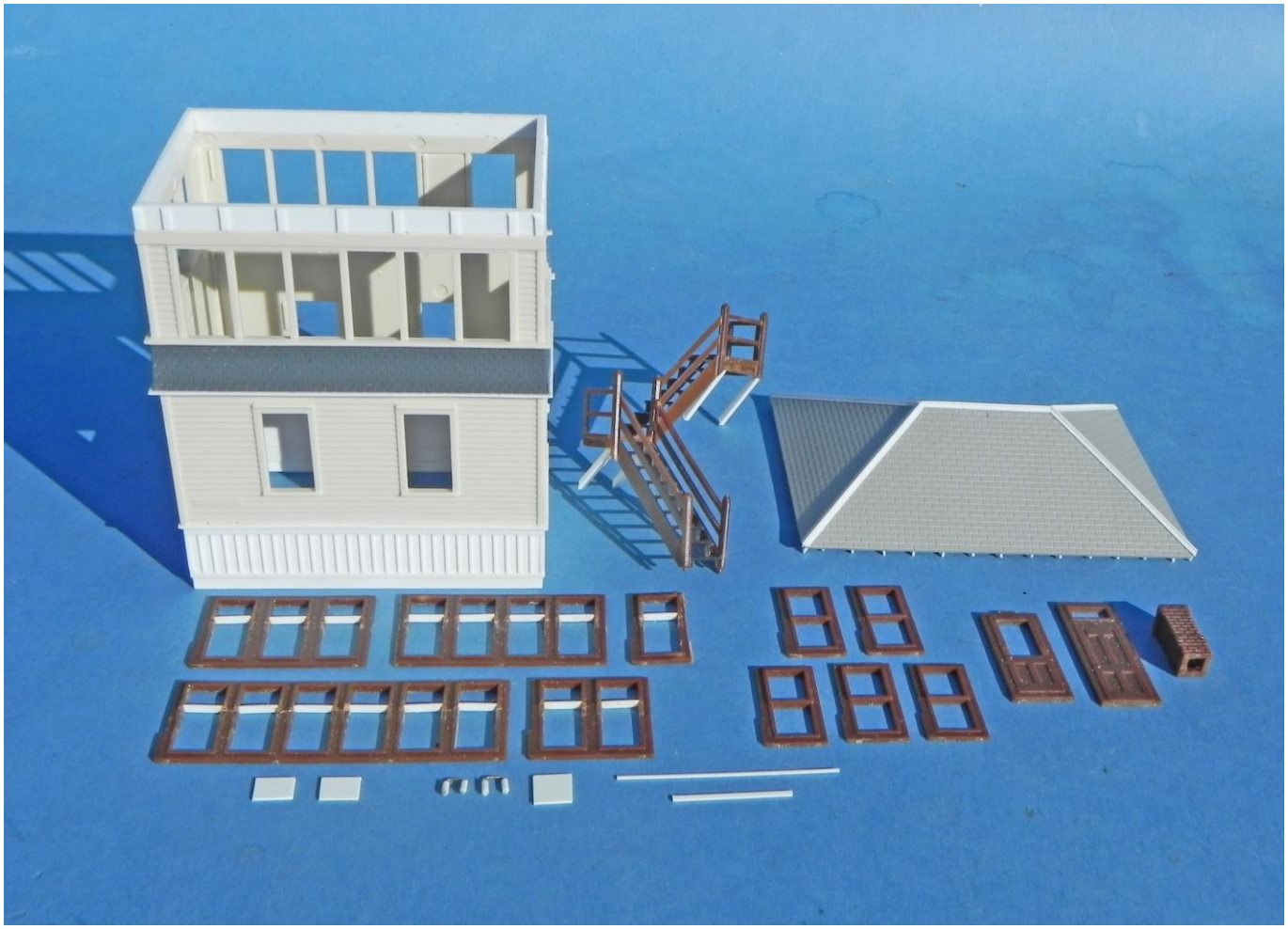


Photo 22 – Ready for Painting

Test fit the roof. To simplify painting, I painted my model with the following subassemblies, to be assembled after painting:

Tower Body
Roof
Chimney
Stairway
Window Frames
Doors
Block Tower Sign
Order Board

Wash the subassemblies in a non-oily dish detergent such as Ivory Liquid.

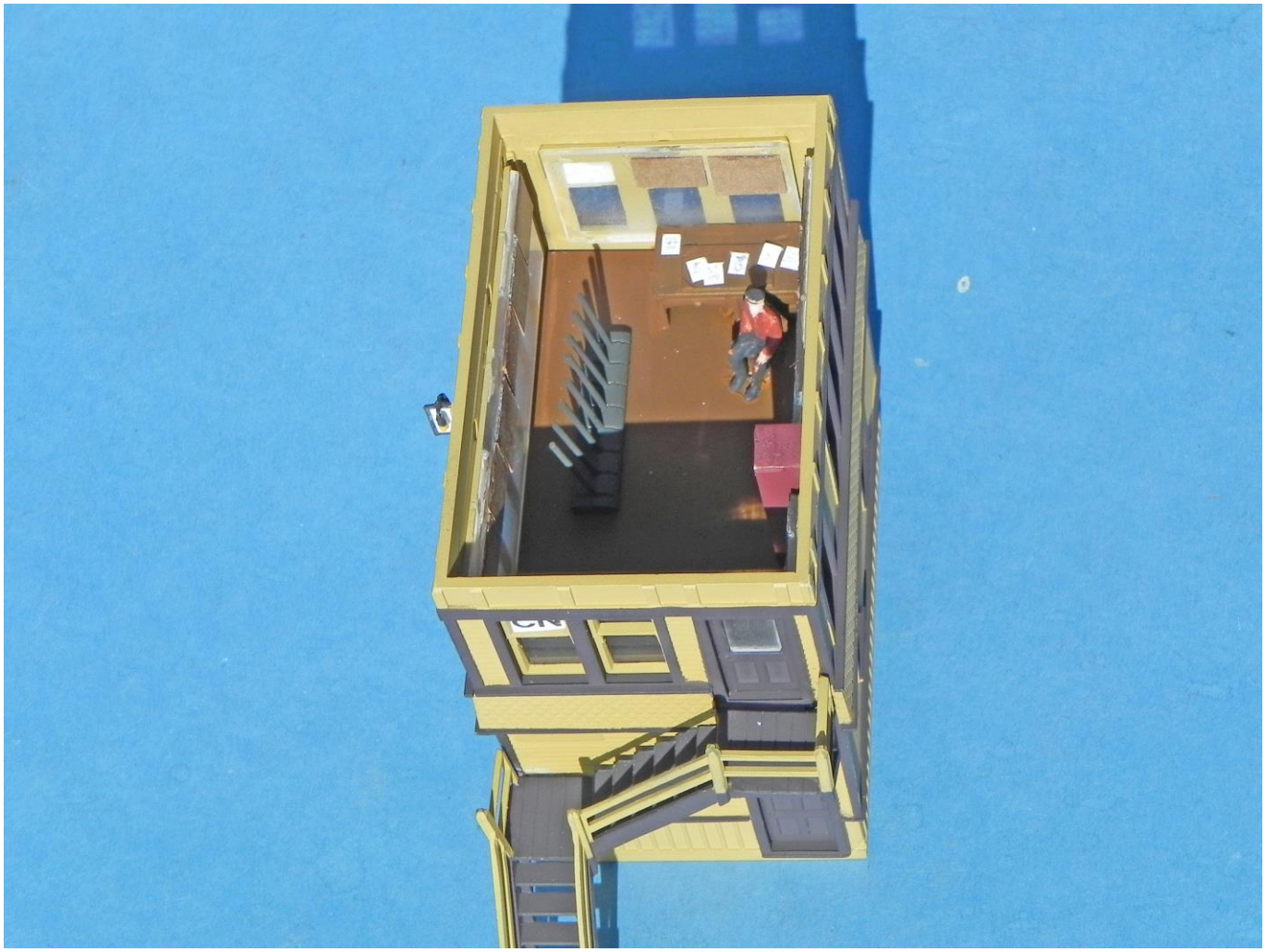
Photo 23 – Paint

Across and even within eras, B&O structure paint could vary widely. Prior to about 1947, standard paint for structures was Indian Red with black trim; the page 40 photo of Hyndman's Q Tower in William Price's *B&O Steam Finale, Vol. 2*, illustrates this scheme. Siding, window sashes, and stairway railings were red, with horizontal trim, window frames, and stairway steps black.

Post-1947, as towers were repainted, the red areas were replaced with buff, while black was retained for the same areas as before. An example of this scheme appears on UN Tower in New Castle, PA, on page 14 of the Q4 2013 *Sentinel*. Note that variations surfaced -- for example, window sashes and stairway railings might be painted black. The buff-black scheme was common until circa 1970.

About 1970, standardization went out the window as towers were repainted. In some cases, brown directly replaced the black. Simplification increased, with horizontal trim becoming buff and only the windows receiving brown; in some cases, towers became all-buff, often faded to pinkish. The C&O influence resulted in some towers being repainted all medium gray, sometimes with darker gray trim. Modelers are encouraged to seek out photos of the specific tower and era that they plan to model.

In later years, interiors were gray, with earlier eras gray or buff or sometimes Slumlord Green and Cigarsmoke Buff.



Tower interior.

I model Cincinnati as a location, and am depicting a generic, fictional B&O tower named "CN," circa 1950 in the buff and black scheme. The buff-painted areas mirror the red-painted areas in the William Price photo noted above. I continue to work off my stash of discontinued Floquil paints, using Depot Buff and Weathered Black; the roof is Grimy Black and the chimney Boxcar Red, both with some weathering. I elected not to weather the tower, presuming that it would likely have been freshly repainted in the new post-1947 buff-black scheme.

In his *B&O Modeler* article, Greg LaRocca presents a novel paint technique for representing a slate roof which some modelers may want to try. In the *B&O Modeler No.40* article on WD Tower, Bruce Elliott suggests PolyScale CSX Tan as a replacement for the discontinued Floquil Depot Buff. Of course, PolyScale CSX Tan is discontinued, too.

Assembly should be straightforward, with the following sequence suggested – glue window glass to windows, glue first floor windows and door to structure, glue interior components to floor (be sure to allow clearance for the windows), glue floor to structures, glue second floor windows to structure, and glue stairway to structure.

Tower Rear

Most towers had shades, which could be dark green, tan, or gray. I used a Pendaflex file folder for my dark green shade material; its opposite side is a credible tan color. The shades generally covered the top portion of the windows above the sash divider, often with varying lengths.

On my model, the stairway ended up nearly two feet too short; I remedied this with a 4’0” x 4’0” plank landing built from .020” scribed styrene and .040 x .188” supports.

Apply decal tower call letters to the call letter sign; I cut my letters from a Microscale #90102 alphabet decal sheet. Note that the bare white styrene signs will need a glossy clear coat before applying the decal letters. Glue the signs into the upper sash on the side windows closest to the track.

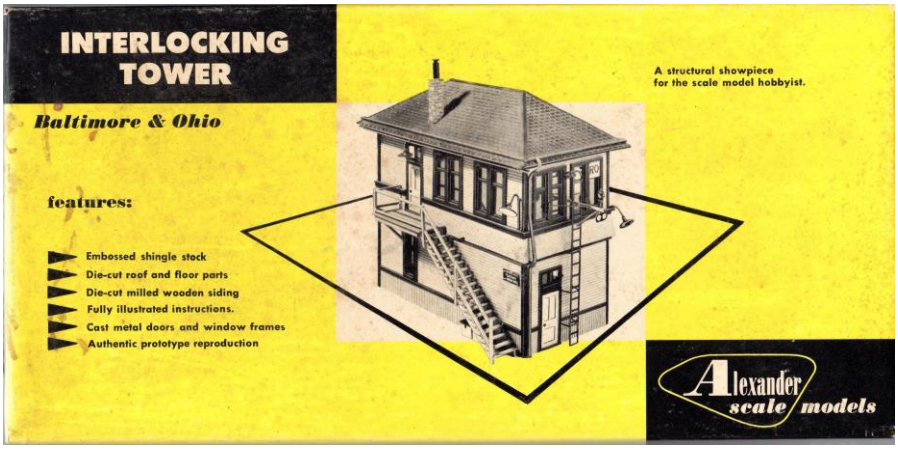
Glue black-painted .020” x .020” strips around the border of the train order board, and mount it to the tower between the two center windows on the track side of the tower. Glue the signal lamps to the top edge of the order board; paint the bottom of the lamp nearest the track yellow, and the one closest to the tower red.

Place the front of the tower 10’0” from the nearest rail. Consider adding control rods from the base of the tower to the various switches, a fuel oil tank for tower heating, and some general clutter around the tower’s base. Several years ago, Peco came out with several kits for control rod and bellcrank assemblies that Bruce Elliott finds too crude. With those final details, she’s ready to control movements on your model pike.

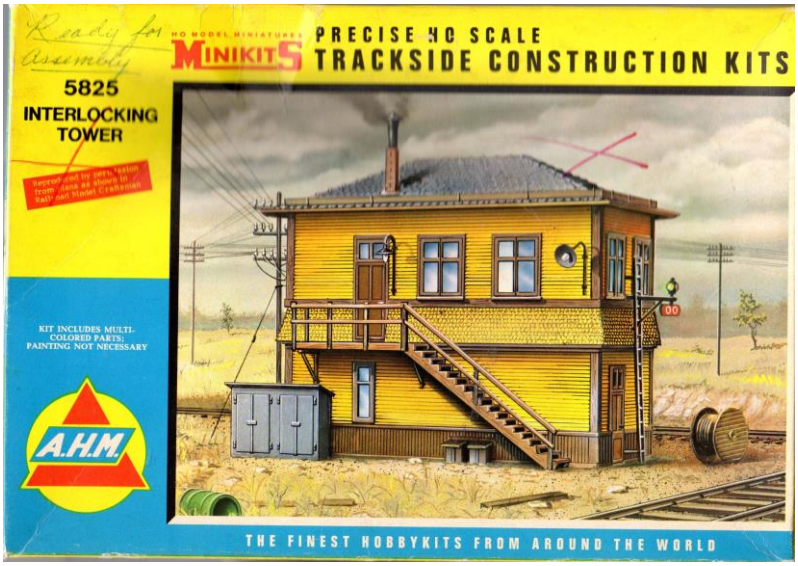
SOME EDITORIAL COMMENTARY ON TOWER MODELING HISTORY

JOHN TEICHMOELLER

Back in 1959, the Michigan firm of Alexander Models began producing a line of kits based on actual prototypes. One of these was the B&O tower located at Wellsboro, IN. Alexander was an early adopter of "prototype modeling" with every kit in their line I believe based on an existing prototype. The kit was reviewed in the April, 1959 *Model Railroader.* Alexander also sold the soft metal detail castings as separate parts. As a teenage member of the Columbus, Ohio Model Railroad Club I accepted an assignment to build up the kit, heavily weathered, for placement controlling the throat of the Portsmouth yard on the club layout, and I think it came out well—wonder where it ended up?



Some years later Associated Hobby Manufacturers came out with an injection molded kit of the same tower; I believe there were some subtle differences including the fact that—at least to my eye—the plastic kit's roof pitch is more gentle.



Gary Schlerf wrote a brief piece in *The Sentinel*, 1985 No. 2 on these kits, mostly about painting. Of course, none of the paints he mentioned are available now. He also noted that the kit had been produced as Tyco 7773. One feature of the "standard" drawing that was missed in both of the above was the fact that the bottom course of siding is shown as board and batten whereas on the models this course is rendered as simple vertical tongue and groove siding. Bob renders this correctly.

When you compare the standard drawings with these kits, at first blush it appears simple to kitbash other variations. But when you actually study the cuts needed, it turns out to be fairly involved as with Bob's project here.

Along the years one of the versions of the standard tower was part of the Webster Classic Models Line which was manufactured by American Model Builders (AMB). AMB is not currently cataloging a B&O tower kit. MJB Models has produced some tower laser kits too, reviewed by Bruce Elliott in *The Modeler;* these kits seem to be not easy to obtain. And the Alexander kit is back in production by a new Alexander Models, this time as a laser kit also.

JD Tower, Hyattsville, MD, 9/1991 during Society convention. Operator Alan Brougham was our host. The tower was in its final days and Alan "closed it," I believe moving on to "Miller" R which he also closed. Due to the late afternoon sun it's hard to tell but the tower still is in the buff and black trim paint scheme, in bad shape. But it still has its rooftop finials.

Operator area, R tower in exile in Martinsburg back open to the weather and before restoration. There's your Slumlord green and Cigar smoke buff paint.

SCALE TEST CAR

BY FRAN GIACOMA

PHOTOS BY AUTHOR UNLESS OTHERWISE SPECIFIED.

As promised in my track scale article in *B&O Modeler No. 52*, I built a 40,000 lb. scale test car to serve as a companion to my 80,000 lb. car.

I based my model on the photo of B&O X4916, a 40,000 lb. scale test car I found on the Internet. This car was manufactured in early 1956.

Starting with a Walthers 80,000 lb. scale test car, I did the following:

1) shaved off all the cast on grabs and installed properly sized and bent new ones made with Tichy .012" bronze wire,
2) modified the body and relocated the "hatches" on each side to represent a 40K lb car,
3) installed Kadee #53 scale couplers, Hi-Tech Details air hoses, and cut levers made from Tichy .010" wire,
4) sprayed it flat black, then a coat of Krylon gloss coat,
5) lettered it using Mount Vernon Shops B&O scale test car decals,
6) painted couplers flat red, air hoses dark gray, and hand railing, grab irons and cut levers yellow,
7) sprayed it with Dullcoat and applied light weathering with PanPastels, and
8) added white sign on hand railing (original from Ed Bommer, I am pretty sure).

I did not outline the four step areas in yellow like the prototype due to some spacing issues at two of them. The model is "close enough" to the prototype to operate on the layout. Now I'll have to go back and upgrade the old Stewart 80K lb. car!

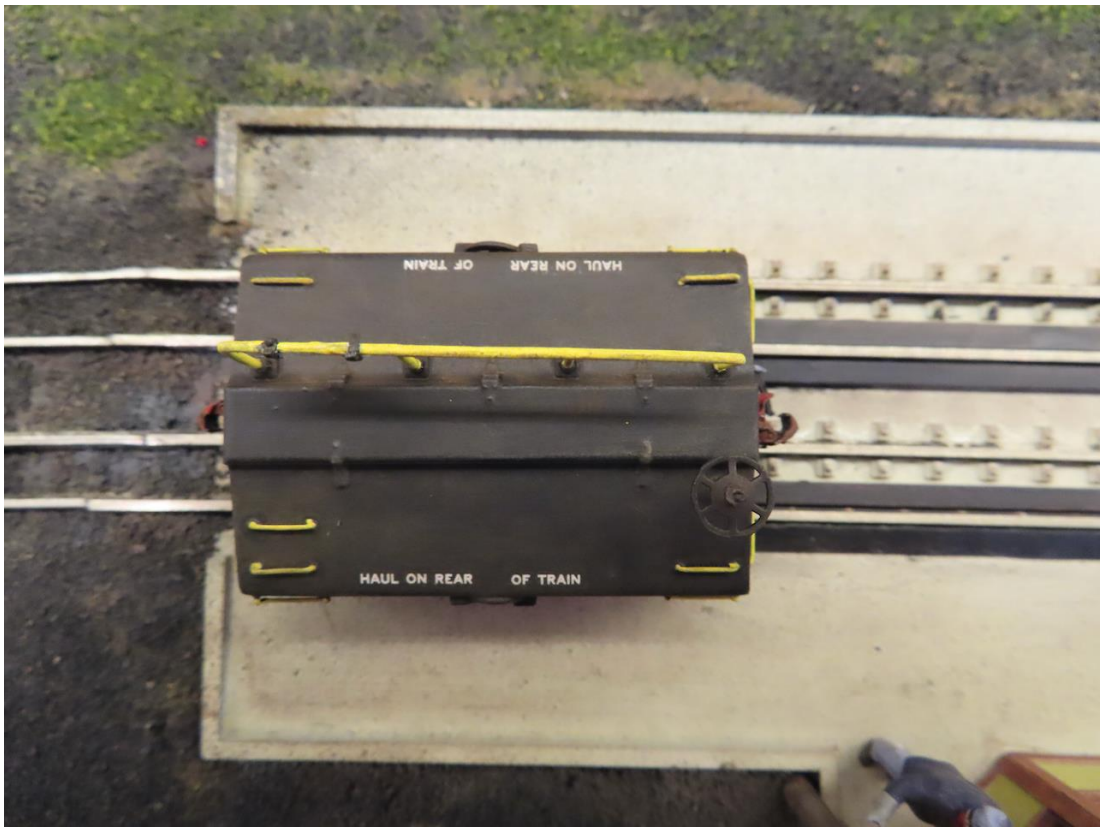
[Editorial comments: Over the years a number of HO models of scale test cars have been available. None is "perfect" from a detail standpoint, depending on how particular you are. The earliest one I know of was a soft metal kit from Stewart (ca. 1958-59). This kit incorporated wire grab irons but no cut levers or brake rigging. Then came another soft metal product branded DJH, I think imported from England, ca. 1986. This was a nice kit, similar to the Stewart version; I built up and painted mine to represent a PRR prototype (with scratch-built Carmer cut levers and brake shoes and hangers). I never finished it because no decals were available at the time with the PRR lettering TEST WEIGHT CAR. Now I can finish it and convert it to a B&O car by changing the cut levers to rod-style and using Mount Vernon Shops B&O decals. Somewhere along the way Overland did one in brass but photos of the model show a more modern brake wheel arrangement. Then Walthers offered one, and most recently one was issued by Bachmann. Both of the latter two have cast-on details that can be carved off. The Bachmann version was offered in undecorated kit form and included several different configurations of the railing and placard. Published photos often show an 80,000 lb. car in companion with a smaller, older design car, the smaller one having "pedestal" type journal assemblies. One of the latter type is an ex-PRR unit at the Railroad Museum of Pennsylvania at Strasburg and another PRR car is at the Railroader's Memorial Museum in Altoona. I am not aware of any B&O scale test cars that have been preserved.

The B&O's annual Summary of Equipment contained data on in-service scale test cars.

Pat Wider's article in *Railroad Prototype Cyclopedia No. 12* has more photos of scale test cars and lots of prototype information. And be sure to take a look at Ed Kirstatter's article in *B&O Modeler May-June 2008* entitled "Modeling B&O's Scale Houses, Scale Test Cars and Tool Cars." JT]

Side view, Car X4916

End view, Car X4916

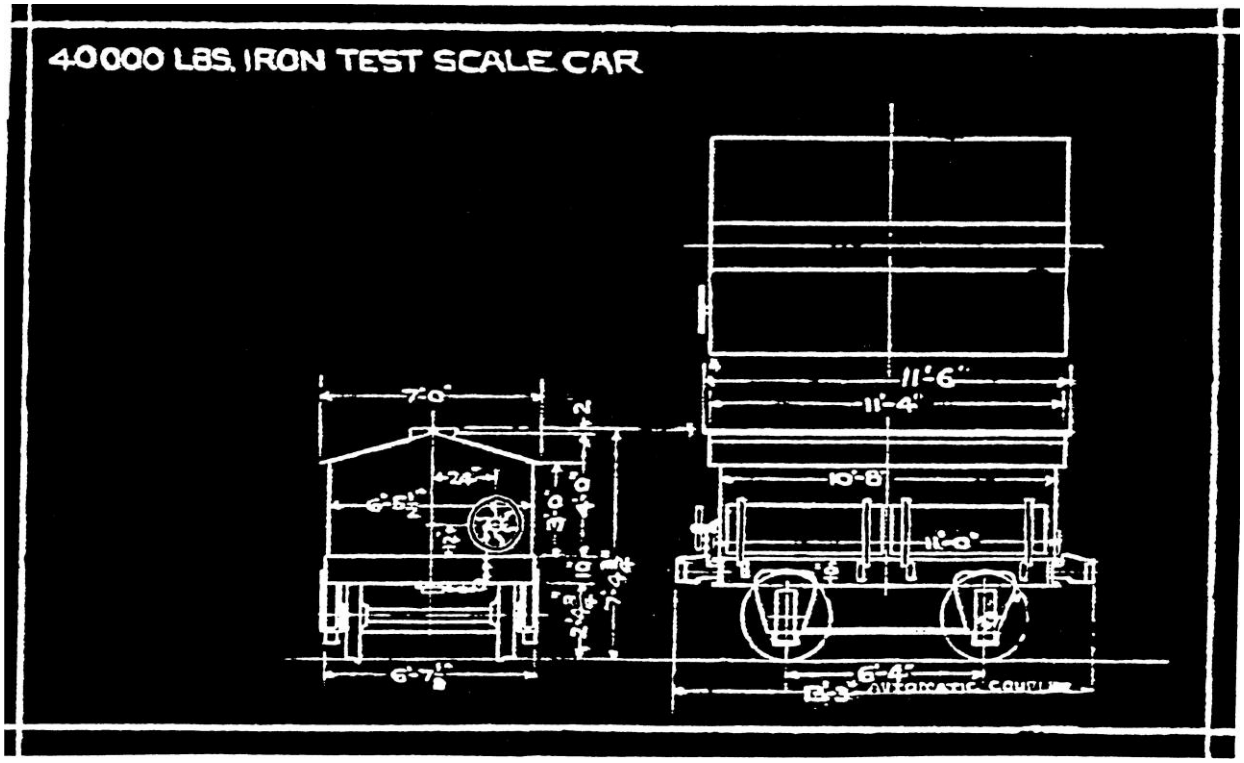


Top view, Car X4916

Cars 4911 and 4916 at Buckhannon, WV, 1962, photo by and from collection of Bill Gawthrop,
http://www.rrpicturearchives.net/showPicture.aspx?id=1075858

CSX car 914226 , 40,000 lb. car photographed at the Locust Point ore unloader, during the Society's 10/1995 convention. The car was there to test the scale on the ore unloader. To do this it was jacked up and suspended by rods from the scale bin. John Teichmoeller photographs.

Car X4904, a 30,000 lb. "old style" car with pedestal journal supports. Photographer, date and source unknown.



Dimensioned drawing of 40,000 lb. Car, courtesy Ed Kirstatter

Ed Kirstatter's photo of his S scale model of Car 4905

NORTH AMERICAN RAILCAR CORPORATION/PULLMAN-STANDARD B&O BOXCAR MODEL

BY MIKE SHYLANSKI
PHOTOS BY AUTHOR UNLESS OTHERWISE SPECIFIED.

A Boxcar Glut

They say that a cat has nine lives, and that was certainly true of 200 Chessie-cat/B&O painted small box cars leased by the B&O in 1985. It seems that General Motors, a customer of obvious importance, wanted good quality box cars to use to ship replacement parts from Michigan to a GM warehouse and distribution center in Martinsburg, West Virginia. The facility was receiving parts in 50-foot, 60-foot and even 86-foot box cars, but more and better 50-foot cars were needed. The Chessie System wanted to take care of this customer and decided to lease readily available, second-hand box cars for the job. From the mid-1970s until 1979 thousands of colorful cars had been built during the so-called incentive per diem (IPD) box car boom, many for short line railroads. Some of the Class 1 railroads were not happy with the box car situation, however, and through their actions and Federal deregulation, a large percentage of these IPD cars were parked on sidings in around 1980 when the U.S. economy was ailing.

What was bad for certain investors in IPD cars and for car leasing companies was good for the Chessie System. The B&O made a deal with Helm Financial Corporation, San Francisco, to have Helm serve as its agent for leasing the 200 IPD cars it desired. The deal focused on cars that were immediately available and could be upgraded to meet GM's fairly strict specifications. Helm arranged to inspect cars that were stored in Iowa to determine whether they would suit. Many of the cars had been built for railroads that had been associated with a company called the National Railway Utilization Company (NRUC) in the 1970s. NRUC, Philadelphia, prided itself on acquiring and managing a large fleet of mostly 50-foot box cars. The cars were built by several different builders and even by an NRUC plant in South Carolina called Golden Tye that was operated by the Pickens Railroad. NRUC cars typically were painted light blue and had a metal plate on the door that had the colorful red, white, and blue NRUC emblem, which takes certain elements from the American Flag. The cars stored in Iowa had started their lives earning a buck for several NRUC lines, chiefly Norwood and St. Lawrence (NSL), the Morristown and New Jersey, and the Peninsula Terminal. Many of the Iowa castaways had once been leased by the Santa Fe and had been patch painted with SFLC reporting marks when run by that railroad.

Helm decided to acquire cars that had been built by three different builders: Southern Iron and Equipment Company, Ashland City, Tennessee, (which was associated with Evans); Berwick Forge and Fabricating at its Renovo, Pennsylvania facility; and Golden Tye from P-S kits. Helm had little trouble finding the 200 required cars; also on their cars GM wanted to feature special door opening assist wheels supplied by the Hennessy Company. Fortunately, NRUC liked Hennessy wheels, and most of the stored cars had them. Consequently, deals were struck in 1984 that called for cars selected by Helm to be sent to Transco Railway Products, where belt rails would be installed and door wheels repaired or added where necessary. The cars would be completely repainted in B&O Chessie System livery. The panels on the doors that once held the NRUC logos were kept but painted over. The cars were to be given Chessie System class B-133 and would be numbered B&O 401000 through 401199. Cars 401000-401093 would all be SIECO cars; 401094 through 401169 would be Berwick cars; and finally, and most importantly for this review, cars 40170 through 4001199 would be Golden Tye cars. The Golden Tye-Pickens cars appear to have become available in the fall of 1985 and seemingly were kept pretty busy ever since.

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This interesting 2001 shot from Jeff Hanke shows a former B&O GT-Pickens car in its later ALAB reporting marks. Note that these were Plate C cars but not as high as some. Also note that the left car is a former NRUC car in at least partial original 1970s paint. The car on the right is a former Union Pacific car that ALAB picked up second-hand as well. The ALAB "Chessie survivor" car still has its original Hennessy door opening wheel, but some ALAB cars had lost them by this time."

B&O 401187. Alan Gaines photo, Garrett Indiana, 5/26/1991

The new PWRS/NARC HO model well represents the 30 Golden-Tye built box cars acquired to carry auto parts to

Martinsburg. The model is nicely painted and detailed. Note the unique door opening wheel, a nice touch that appears to be a first in HO models—at least as far as that size of wheel is concerned.

Model Background

Now to our "guest" model cars being reviewed but we will mix in just a little more prototype information. An aggressive model railroad retailer in suburban Vancouver, Canada called Pacific Western Rail Systems (PWRS) has sponsored the manufacture of several exclusive, mostly Canadian-prototype HO models made for another modeling outfit called North American Railcar Corporation (NARC). In around 2015, PWRS and NARC began careful research to produce models of the popular Pullman-Standard 5077 cubic-foot box car family. Pullman started this program by building Railbox cars in 1974. A number of other customers received the cars. Eventually Golden Tye built almost identical cars from P-S kits. All in all, more than 4,000 of the P-S 5077 cars were built by Pullman or others before customers turned to larger, 5277-cubic-foot cars.

NARC finally shipped a variety of P-S 5077 models in 2021. This was a relatively ambitious undertaking. The models have two basic car bodies with a differing number of external posts and a bewildering variety of different side sills and doors. Models decorated for one road name even feature a different, non-Pullman roof. The various models are painted for a number of different railroads in authentic painting and lettering schemes, though one might quibble over some of the colors used. The bottom line, and most importantly for us, they produced very nice B&O models in multiple car numbers that well represent the Golden Tye cars leased for GM service.
Model Specifics

Model Specifics

The NARC B&O model has a very well rendered version of a proprietary Pullman-Standard door with popsicle stick shaped impressions. While P-S proprietary doors often were replaced in service, for some reason nearly all of the 30 Golden Tye-Pickens cars retained their doors until the cars were scrapped in the early 2000s. By then, of course, the B&O was long gone, and the cars had subsequent owners that we will talk about later.

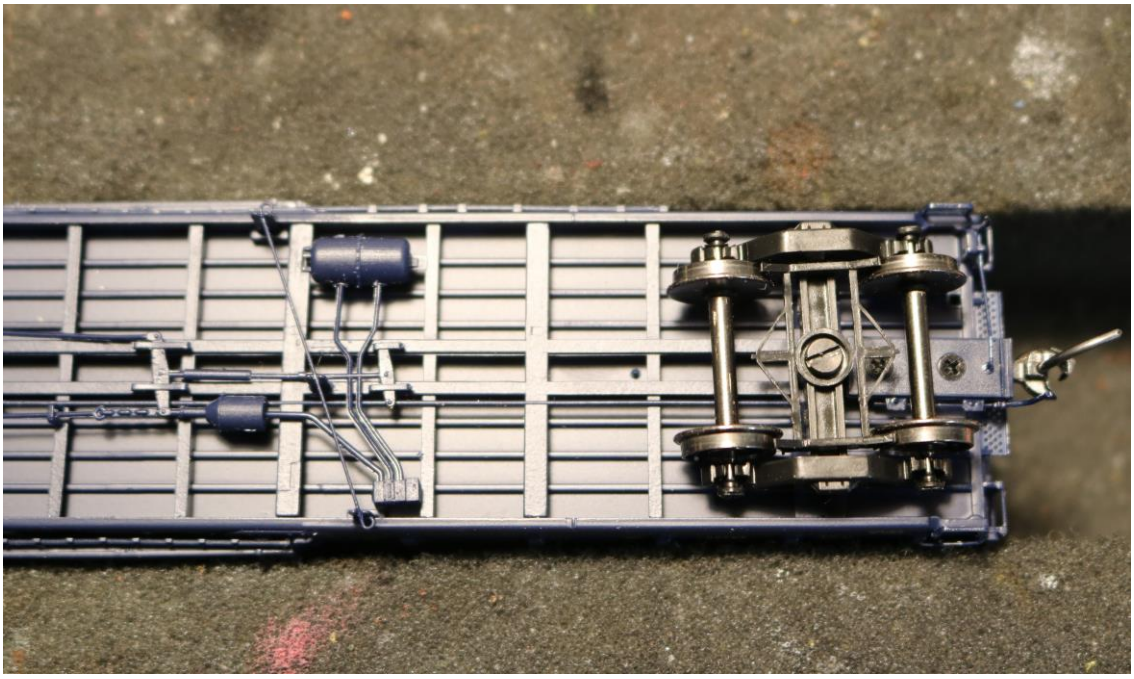
The model, available in at least six road numbers, has a nicely proportioned P-S proprietary door. Note the simulated former NRUC logo plate welded onto the door of a real car.

The B&O model box cars have a correct P-S roof that seems well rendered to me. The bow-tie shaped impressions in the roof panels are not as pronounced as those made by some other model manufacturers, but I think they are quite acceptable.

The PWRS model has a decent P-S roof that is just slightly lacking in definition. A touch of weathering will bring out the detail and take care of any concerns over this molding.

The exterior posts and ends of the cars look good, and the underframe is nicely detailed with state-of-the art brake piping and levers. The car has what appear to be Kadee 158 couplers, which I think should be the industry standard.

I like the model end. The detail looks good. Note the etched crossover platform and apparent Kadee coupler. A good looking coupler lift bar is installed, as is a simulated air hose.



The model has an excellent looking underframe with an unusually rendered air release rod. The slotted rather than Phillips style truck mounting screw is a bit unusual for a currently produced model.

The cars have very good Chessie System paint. The blue looks correct, and the yellow of the lettering is decent as well. The car has a prototypical small warning stencil: a red box to the left of the door that cautions people not to open the door with a fork lift, but rather to use the door opening wheel.

On the negative side, the car model is almost an ounce under NMRA recommended weight, and it is rather difficult to add weight to the car. Also, NARC forgot to put door latches on the car doors—a curious omission.

I needed to add weight to the car. , The roof is firmly glued on and would be difficult to remove. I pulled off the door and found there was no opening. There were two mounting holes only.

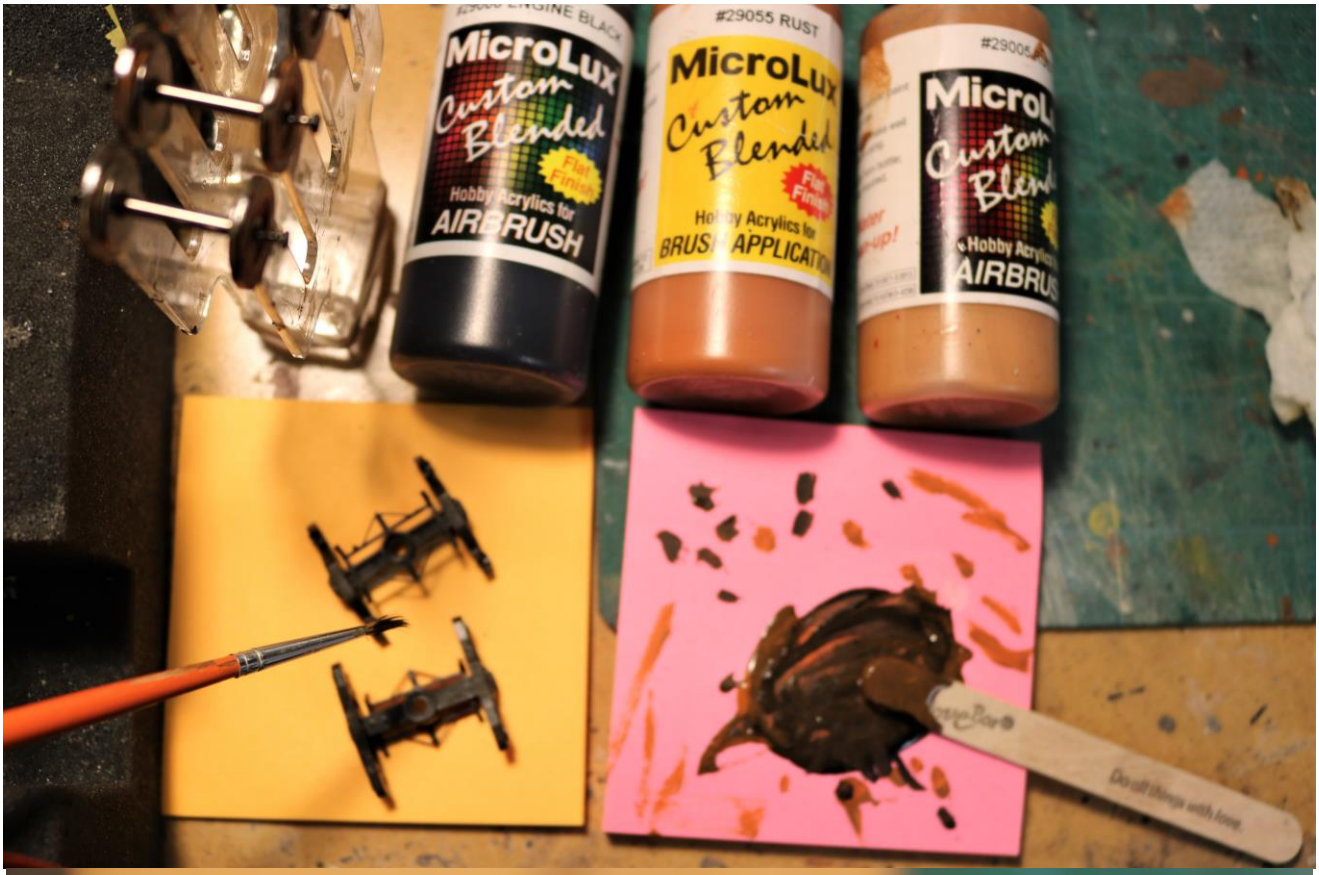
Please do not laugh too hard at the quick and dirty opening I carved into the door with my Dremel tool so I could add weight to the car. After I glued an ounce of weights onto the car floor, I remounted the door and this completely hides the ugly hole. The PWRS website shows another approach involving a YouTube roofectomy by a customer on one of their N-scale products

There are two minor shortcomings to the decoration and detailing of the cars. First of all, the Pickens cars had a raised ACI label on a plate welded to the left of the door in the middle of the car. When the Golden Tye-Pickens cars were repainted for B&O, the then obsolete ACI label was removed and the plate was retained but painted over. The NARC does not model this feature. However, on the real cars the red warning label was offset a tad to the right so it was not "crowded" by the raised plate. NARC neglected to do that, but most people would never notice this. More irksome, though, is a minor positioning problem with the ampersand in "B&O." On many Chessie System cars, the "B" is in one panel, the ampersand is applied over an external post, and the "O" is in a panel to the right. I believe based on the photographs I have seen that that is what should be the case for most if not all of the Golden Tye-Pickens B-133 cars. Now, just to confuse things, when Transco painted other B-133 cars made by SIECO or Berwick they put the ampersand completely to the right of a post on the car thus pushing the "O" to the right a bit. NARC painted the Golden Tye-Pickens cars like the SIECOs and Berwicks in this respect, but, again, most will not notice.

This side by side comparison shows the B&O reporting marks on a real B&O GT-Pickens car as opposed to what PWRS decided to do on its model. There are not a lot of photos of the 30 prototype GT-Pickens cars out there, but all that I have seen have the ampersand as on B&O 401199. It is possible they PWRS was right in decorating certain of the model cars this way. B-133 cars that were made by SIECO or Berwick had the ampersand done like the PWRS model. The Chessie System usually did put the ampersand over a car rib, however.

Speaking of door opening wheels, NARC has put a fairly good looking 8-spoke Hennessy wheel on a simulated track on these cars, and I think this larger Hennessy wheel is right for the B&O. When the cars were first built and placed in the PICK 555000-55580 series for the Pickens Railroad, many of them had different Hennessy wheels with a smaller number of spokes. As far as I know, this model is the first HO ready-to-run model with the large, eight-spoked wheel. Some different box car models of mostly NRUC cars had Hennessy wheels that were very close to standard modern brake wheels. Some other NARC 5077 models such as their rendering of the Saint Lawrence cars, do have the smaller wheel. In essence NARC tooled this wheel exclusively for the B&O modeler. One can hope they will make the wheel available to modelers separately since it was used on other Chessie System cars as well as on some cars owned by different railroads. Now, the door wheel on the B&O model is a little on the thick side but otherwise pretty good looking, but the wheel is mounted a tad too low and too close to the door. On the real car there were two small cross pieces on the wheel mounting behind and to the left of the wheel that were bright yellow and that are missing on the model.

The model trucks are free rolling and look good. They well represent the real thing. Interestingly the trucks have simulated rotating roller bearing caps, a state-of-the-art feature found on a number of high-end models today. Like 95 percent of model trucks, the wheels and sideframes could stand some weathering.



The rotating bearing cap axles need to be gently lifted out of the truck before weathering them. The second shot shows the Microlux paints used to weather both the wheels and the truck sideframes. I used a blacker paint on the sideframes as opposed to the pure rusty look of the wheels. This particular car is slated to become ALAB 401190, so the wheels needed to be dirty as they would be on a car in service for a decade or so.

If you are modeling 1985 to maybe 1990, then only light weathering would be needed on the model. It would appear that Helm had the roofs of the cars newly painted aluminum color, so little work would be needed on weathering these. One car only among the 30 got CSXT reporting marks. It was CSXT 508266. I have not seen an image of the car, but some of the five other B-133 cars that got CSXT marks were patch painted: a blue box was painted over the "B&O" and the car number.

Speaking of the future, after spending five or more years in B&O marks the real B-133 cars continued to get around. Big changes in ownership came to most if not all of the Helm-leased cars in 1990. Fully 95 cars from the group numbered B&O 401169 or lower and four cars in the CSXT 508xxx series were acquired by the Kansas City Southern. KCS painted blue patches over any Chessie System lettering and renumbered the cars to KCS 161000 through 161094. It is important to note that the leasing documents provided to the federal government specifically stated that KCS got none of the former B&O cars numbered from 401170 on up.

So what happened to "our" cars? Well, in 1990 13 of the B&O Golden Tye-Pickens cars received NOKL (Northwestern Oklahoma) reporting marks and numbers (8767-8778 and 8781). Most if not all of the cars retained their Chessie cats and "Chessie System" lettering. In 1994, the then remaining 16 B&O-marked Golden Tye-Pickens cars went to the Alabama Railroad and received "ALAB" reporting marks but retained their B&O numbers and other lettering. The NOKL cars slowly decreased in numbers and disappeared by 2005. While they may have been scrapped, it is known that some of the NOKL ex-B-133 cars ended up with yet another owner, the Bangor and Aroostook. Around 15 of the ALAB cars soldiered on until at least 2006. One car may have survived until 2010. As we said in the beginning of this article, these cars had nine lives.

I gently removed the B&O reporting marks but the left the car number in place. I masked out a rectangle and gently painted in a blue patch. I added white ALAB decals then weathered the car side.

Early CSX modelers should be happy with the NARC model. Since most of the Golden Tye-Pickens built cars never lost their doors and many retained their Hennessy wheels, if you add a simple blue box to your car for the reporting marks and cover the "B&O" on the ends, you can model a really dirty weathered car with ease that is good until 2006 or beyond. The NOKL cars would be only a little harder to represent. You could make KCS or even BAR cars by patch painting and applying new owners and car numbers, but this B&O fancier will give that a pass.

To sum up, you late B&O modelers and CSX modelers should be quite happy with the new NARC models. They are good looking and mostly quite accurate cars. I know I am happy to have added them to my collection.

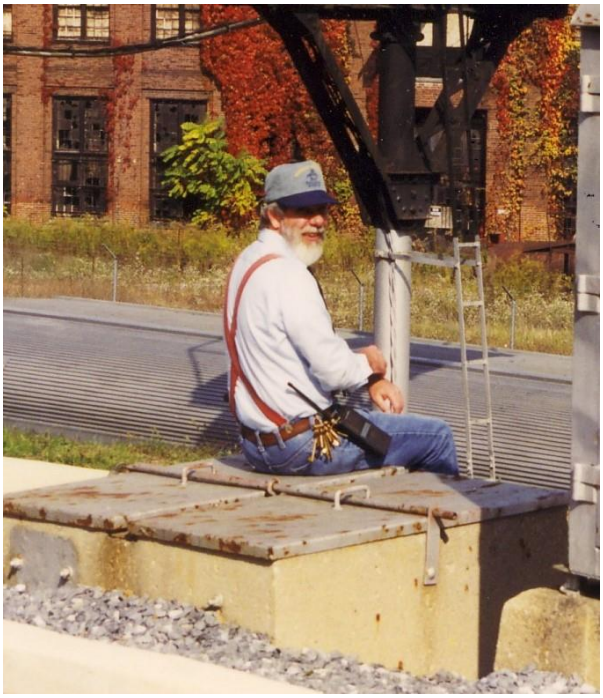
Availability: By the time you read this, these cars, especially the 5077s of various railroads may be sold out at Pacific Western. Pricing was $41 for a single car or $125.85 for a 3-car set. Contact Pacific Western Rail Systems by phone at 1-866-840-7777; website at https//pwrs.ca or their US mail address of 250 H Street PMB 779, Blaine, WA 98230

Weighted and weathered B&O 401175

REMEMBERING JOHN SCHLETZER

BY JOHN TEICHMOELLER

PHOTOS BY AUTHOR UNLESS OTHERWISE SPECIFIED.



B&O Museum Trip to Martinsburg, WV, October 1998

When you bring up John Schletzer's name among a group of railfans a common reaction is something like: "I didn't really know much about him…. but he seemed to be a strange and interesting guy." When I learned of John's death, I had the same reaction. Then as I got to thinking it turned out there were more memories than I originally thought, so let me share some of them.

I understood that John spent at least some of his early years in the Marietta, OH area. He was a plumber by trade and was for a time employed by the Western Maryland Railway. After a bout with cancer and a disability settlement he devoted much time and effort as a volunteer in train operations at the B&O Museum. His wife, Marianne, was supportive of his railroad enthusiast activities. John once told me that he and Marianne were riding in an open car on a railroad fan trip and John noticed that Marianne was rejoicing in the smell of the diesel exhaust. John said then he knew Marianne was the right girl for him.

John was both a modeler and an organizer. After Tropical Storm Agnes did a job of messing up downtown Ellicott City in 1972, a group of residents got together and formed Historic Ellicott City, Inc. One of their projects was to have an HO model railroad constructed in the newly restored E. Francis Baldwin designed freight house. The layout was to depict distinctive features of the Old Main Line from the 19th century. A team from the Mt. Clare Division of the NMRA offered to undertake this task, and John was part of the group. The layout could be operated more or less automatically as a "display/exhibit" or operated manually. The agreement with the HEC folks was that the Mt. Clare guys could "operate" on the layout when the museum wasn't open as long as they restored the "exhibit settings" when they were finished. John told me that things went along fine for a while until the "operators" became careless in restoring the settings. Most egregiously, they operated with "live" coal loads that spilled and apparently were not always cleaned up. A number of those folks are still with us; John took pride in these activities and when County officials held a celebration of some renovations to the station in the summer of 2001, John offered his own reflections on the layout project.

Before the B&ORRHS established its early archives in Arbutus, MD, John was instrumental at organizing periodic meetings of local B&O fans at the Ellicott City freight station to view slides. One of those meetings was particularly memorable to me. One Friday night during our meeting a westbound empty hopper train went through.

Of course, the meeting stopped and everyone went out on the platform. Above the clatter of the passing train, we could hear some shouting. We looked around for where it was coming from and saw that it was John who had climbed up on the roof of the adjacent I-5 caboose, hollering about the "XXX" paint job on many of the old hoppers.

John was always amazing us as he switched modeling loyalties among B&O, WM, EBT and maybe PRR and also between HO and O scales. (John once told me that Marianne was particularly a fan of the PRR. I suggested he should get her a membership in the PRRT&HS, but I don't think he ever did.)

When John switched themes, he would typically liquidate the previous theme models at heavy discounts. I had one experience with this. The brass import company W&R produced an HO model of a Clark side dump car used in roadway maintenance. This was a very intricate model even though it did not "tilt/operate" and was quite expensive and hard to get. I wanted to get one (the B&O had some) but balked when I saw the price. At some point John and I were discussing the car. He said he could use some money and had one that he would sell for a price that was less than original. So, I took him up on the offer. (A couple years later I found one at Timonium for a decent price which I acquired—you can't have just one!) In 2013 when I was photographing some of John's cars, he had acquired another one of the Clark cars in his collection now. He offered to buy back the one I had bought from him but I didn't need the money.

The September 1964 and June 1964 issues of *Model Railroader* contained two articles describing and illustrating the car and locomotive rosters of Julian Barnard of Shelby, OH. Barnard was modeling the B&O between Baltimore and Philadelphia and was determined to build all his required rolling stock before building the layout. Of course, at that time much of the equipment had to be scratch-built. (Barnard later founded a "competitor" organization to the B&O Historical Society but that's another story.) John found Barnard's work powerfully motivating. In 2012 John asked me to start photographing his models for potential future use in a "One Man's Roster-John Schletzer" article in *The Sentinel* or *The B&O Modeler*. John brought scores of his models to the Somerset convention and set them up Thursday, annoying Bruce Elliott because of the number of tables John occupied with his models. I was planning on photographing them on Friday or Saturday night. However, Friday morning they were gone. John had "not been feeling well," and went back home to Hyndman, PA, taking his models with him. He checked into a hospital to learn he had suffered a mild heart attack. We did arrange to photograph the models at the Prototype Modelers Meet in Greensburg PA in 2013, then John brought another batch to my house to photograph inn 2015. Since that time, we have used many of those photos to supplement other articles in *the B&O Modeler*. The photos were shot hastily using my Micro-Mark "Photo Studio in a Box" (Mod 1) and could be better, but my philosophy is a suboptimal photo is better than no photo.

When Julian Barnard died, Charles Roberts of Barnard-Roberts Publishing was the executor of his estate or at least took charge of liquidating the models. One hot summer Sunday afternoon I joined a number of Baltimore area model railroaders for a sale of at least part of Barnard's collection on Roberts' porch on Gun Road on Avalon Hill up from the Old Main Line. Craftsman kits were piled up and priced for quick sale in the living room, then an auction began of the more unique items including the scratch-built MOW and freight car fleet. There were some pieces I would have liked to have had, like those TOFCEE cars, but many of the pieces were no longer up to current detail standards. Market forces dictated the outcome for me as I quickly dropped out when John and Howard Zane got into an animated bidding war.

In 1995 my friend Craig Bossler was working on the Morning Sun *B&O Color Guide*. He was referred to John as someone who could help with the captions to the photos supplied by Bob Yanosey and from Craig's collection. John connected with me and Jim Rogers, and we spent a long evening in Craig's room at the Hunt Valley Inn during the banquet for the PRRT&HS that was having its annual convention there. John offered some different insights into some of the photos. I missed the dinner and the interminable door prize drawings but at least we got the captions done. Later that summer we got together again in John's basement in Arbutus to go over and proof the captions that Yanosey had sent to Craig. There were some errors that had been corrected. However, when the book was published, not all the errors were fixed, and new ones had been introduced. Craig was so mad he wrote a steamy letter of resignation to Morning Sun--which is why you don't see his name on any other railroad Morning Sun Color Guides. I am always interested when I hear negative comments about the book; for the critics, I'm sorry you weren't there to help on the project. Your turn is waiting.

In August 2020 John asked me to come to Hyndman to photograph some more of the models. He was on oxygen by this time and could no longer travel; unfortunately, I was having severe back pain and also could not endure a drive to Hyndman and a photo shoot. In early December I sent some materials to John and the envelope was returned by the USPS several weeks later as undeliverable; the phone number I had for John was no longer in service. As it turned out, John died in October. At this writing the disposition of his models is unknown, but I would be happy to share the two batches of model photos (from 2013 and 2015) with anyone who is interested via WeTransfer.

Former Western Union line car scratchbuilt prior to 1964 by Julian Barnard, Jr. using dimensions supplied by Ed Kirstatter. Barnard and Kirstatter must have been in shorts when this model was built.

COMING IN MODELER NO. 55:

IN PURSUIT OF B&O PASSENGER CARS-
HO MODELS OF B&O PASSENGER CARS 1950 – 1955

JESSUP STATION

(AND HOW ABOUT A COUPLE ARTICLES FROM FOLKS WHO HAVE MODELED SOME OF THOSE "GROUNDED" WAGONTOP BOXCARS THAT DWIGHT JONES WROTE ABOUT IN A RECENT SENTINEL?)