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. Several classes of annual memberships are available, Regular annual memberships are only $45.00. If you would like to join, click here to fill out our membership application, print a copy and mail it to:

B&ORRHS
Attn: Membership
P. O. Box 1608
Sykesville, MD 21784-1608
I’ve haven’t thought of any more of my “favorites” from the Company Store but Craig Close has two to offer this time:

**THE BOOK:** The Society has published a book: *B&O in Baltimore, 160 Years of History in the Charm City Area.* This hardbound book contains 216 pages with more than 400 photographs, some in color. Most of the photos are from the Society’s collection. The book is Item 10171 on the Store website for retail at $64.95. If you attended the Society’s convention in September, you received a copy. If you didn’t get enough about Baltimore in the Salamon/Oroszi/Ori book *Reflections of the Capitol Dome,* you need this book.

**PAPER PLATES:** The Society has produced packs of heavy-duty paper plates in the style of B&O China, with a scene at Harper’s Ferry as on Royal Blue china. These plates are intended for party and picnic use. These are packaged as 24 plates in a pack. A single pack costs $7.99. A 3-pack is discounted to $21, and a carton of 10 packs sells for $65. These heavy items cannot be shipped using the normal Store shipping rates. Contact the Store Manager if you wish to order. The plates will be available for pickup at the Society’s headquarters building in Eldersburg, MD, at times when the volunteers are working, and at various shows where the Society has a presence. If you get the willies at family gatherings when Cousin Eddie picks up one of your pieces of B&O china and bellows “watch this!” you need these paper plates.
UPCOMING EVENTS FOR POTENTIAL B&O MODELS ON DISPLAY OR B&O PRESENTATIONS

We don’t receive direct communications from any Prototype Modelers Meets, so the listings below are a function of Scott’s and John’s “general awareness.” Guess we have too low of a profile! Moreover, since we have an indeterminate publication schedule, some of the events below may have already occurred by the time you read this. Nevertheless, the links provided should provide you with necessary information about the group’s next event.

In any event, let us know if your “favorite” meet that is likely to have B&O content is omitted and give us details. Have other meet organizers send notices to us at: rmighpr@comcast.net.

2020

Prototype Rails – January 9-11, 2020 in Cocoa Beach, FL.

Valley Forge Railroad Prototype Modelers Meet – March 26-29, 2020 in Valley Forge, PA.

B&O Historical Society Western Mini-Con – May 16, 2020 in northeastern Ohio.


B&O Historical Society Eastern Mini-Con – July TBD, 2020 at B&O HS World HQ in Eldersburg, MD.
NEW PRODUCTS
BY CLARK CONE AND THE MODELER STAFF

New Product Notices and Disclaimer
Feedback, positive or negative, continues be silent regarding what we have featured or not featured, realizing that a model is a representation of reality and that modelers have different standards of fidelity. We are continuing to include Chessie System products provided they have B&O reporting marks. Reader’s opinion still welcomed.

As usual, we provide this information in most cases based on published news releases and without detailed inspection of the models regarding prototype fidelity. B&O class designations on rolling stock in such releases are seldom disclosed so we sometimes guess. “Stand-in” products continue to proliferate. As always, let us know if we have missed something that needs to be publicized. JT

Broadway Limited EMD F7A/B, HO-scale

- Available in numbers 180A/180X
- New Paragon3 sound and operation system featuring ROLLING THUNDER with authentic sounds and prototypical operation in both DC and DCC
- Unpowered B-unit
- Factory installed engineer
- Locomotive Composition: ABS Body with die cast chassis
- Couplers: (2) Operating Kadee or Compatible
- Compatible Tracks: Code 70, 83, 100 rail
- Minimum Operating Radius: 18 in or greater

For additional information see https://www.broadway-limited.com/4843emdf7abbando180a180xblueandgrayschemeparagon3sounddcdcho.aspx

Sunset Models - 3rd Rail, EMD F3A, O-scale

New tooling available in the April 2020. Features:
- Ball-bearing "BB": drive
- Phase II to Phase IV detailing
- Reservations closing...standby reservations available.
Sunset Models - 3rd Rail, EMD GP7 and GP9, O-scale

- 2R with QSI Q3 Level DC/DCC with sound
- 3R with ERR Cruise, TMCC with Railsounds 5.0, remote coupler, and smoke
- Road-specific details throughout
- Tank drive (horizontal motor) system with metal U-joints and ball bearing axle supports
- All units powered, all drivers powered.
- Fixed pilots: 3R comes with 2R coupler-compatible pilot
- 3R minimums: 054 simple curves, 072 turnouts and switches
- 2R minimum: 48" radius

For additional information see [http://www.3rdrail.com/reservation.html#GP79](http://www.3rdrail.com/reservation.html#GP79)

Atlas Master M-53 and C-16 Boxcar, O-scale

In the 1930s, B&O was looking to add a fleet of box cars to their roster. Instead of turning to the well-known manufacturers at the time, they went with an in-house design. The wagon top box car was born and between 1934 all the way up to 1960, nearly 5000 similar examples were built by the B&O. The most notable feature of this car is the unique sloped down roof section, which was designed to not allow rain water to seep into the interior of the car. The Atlas wagon top box car captures all of these unique features, with superb printing, separate grab irons, and durable body.

Features include:
- Atlas O release from the recently-acquired Weaver tooling
- L: 10.5" W: 2.5" H: 4"
- Die-cast trucks and couplers
- Prototypically-correct door styles per paint scheme
- Minimum radius: 0-31 (3-rail), 36” radius (2-rail)

For more information: [https://shop.atlasrr.com/c-1427-0242.aspx](https://shop.atlasrr.com/c-1427-0242.aspx)

Available in two numbers: #380288 and #385897 (boxcar red/white)
Available in two numbers: #381711 and #375791 (dual circle, boxcar red/white)

Available in two numbers: #1900 and #1904 (REA green/yellow)

Morning Sun Books, New York Harbor Railroads In Color -Volume 1 (Digital Reprint)

Morning Sun has released a set of digital reprints covering New York Harbor railroads. In Volume 1, noted marine expert Tom Flagg details the marine operations, including terminals and float bridges, of the B&O, CNJ, DL&W, Erie, LV, LIRR, NYC, NH, PRR and independent Brooklyn Terminal railroads. The railroads serving the Port of New York owned and operated fleets of ferries, tugboats, and barges to move freight and people from place to place within the vast harbor. Instead of the switching tracks found in other cities, New York was said to have "a water belt line" connecting all steamship piers and waterfront terminals. Originally published in 2000.

For more information: https://morningsunbooks.com/collections/digital-reprints/products/new-york-harbor-railroads-in-color-volume-1-
NEW PRODUCTS SECOND SECTION
BLURBS AND “WORD ON THE STREET” GLEANINGS BY JOHN TEICHMOELLER

Moloco Insulated Boxcar, HO-scale

From Mike Shylanski: The Moloco company has just announced that they are shipping an HO-scale Fruit Growers Express insulated boxcar in B&O livery. This is a 1970s model. Moloco produces highly accurate cars. I have at least half a dozen or so of their models and have bought their freight car parts as well. The car is available in two B&O numbers. Above is an image of one of them. I have ordered both cars. (We’ll try to talk Mike into doing a review for No. 51) JT.

For more information: https://www.molocotrains.com/collections/freight-cars/products/42002-b-o-repaint-ax-1-75-fge-50-rbl-plt-b-7-7adr-12-2-ctr-door

Atlas Train Man B&O N-44 2-Bay Offset Side Hopper, HO-scale.

751-20005896 Car number 727016 $25.95 due in June, 2020.
751-20005897 Car number 727157 $25.95 due in June, 2020.

Micro Trains 39' Single-Dome Tank, Z-scale


Intermountain 100 Ton Evans Coil Cars
This is a reissue of these nicely-detailed straight-sill, polygonal hood coil HO cars which were offered several years ago by Intermountain, although some readers, including myself, thought it was a new release. Sometimes our memories are too short; at least I didn’t order another car—or more. This version may have enhanced lettering; we hope to have more commentary in Modeler No. 51.
EXTRA SECTIONS FROM THE READERS
BY JOHN TEICHMOELLER AND READERS

We encourage readers to comment on and/or correct content in The Modeler and especially share a snapshot or two of their latest projects. It’s amazing how someone else’s modeling efforts can inspire you to reload a new blade into the Xacto knife and pierce the nozzle of a new ampoule of cyanoacrylate. Here is the latest batch of gleanings from my e-mail inbox and recently terminated Yahoo list postings.

On the Road to MMR
Tom Greco continues his diligent labors towards his Master Model Railroader designation. Tom brought many of his models to the Baltimore Convention in September, and we will have photos of them in Modeler No. 51. Meanwhile here are shots of his RPO car No. 75 along with his Gas Electric No. 6045.

RPO Class H-8 No.75

Gas-Electric No.6045
Concrete Phone Booths (The article from Modeler No. 49 seemed to generate a number of favorable comments as well as add-on responses, below:)

From Fran Giacoma: Per the phone box article (all I can say is WOW!). Attached are two pictures I took for your use in a future issue as a follow-up to the article. They are located along the Philadelphia Subdivision. The one labeled as being in Wilmington was at a sidetrack that served a concrete plant and an alcoholic beverage distributor. It is right next to where Concord Pike (US Rt. 202) crosses under the railroad around MP 25 in the city of Wilmington.

From Ed Kirstatter: I had two of those Ankron Concrete Telly booths in S scale. They may be on Ed Sauers’s layout now in Charles Town, WV. I have only seen two of those out here on the B&O Akron division. I may have missed some. Yes, look in the B&O timetables to find a telephone to use. I only have two of those turned brass ones on my layout here.

From N scale reader Dennis Elliott: All of JnJ Trains products were N-scale. Have attached a photo per your request. Incidentally, long before Fox Valley Models, JnJ Trains manufactured an excellent N-scale I-12 wagon top B&O caboose kit. All you needed was trucks, couplers, glue, paint and decals.

Snow Flanger

More from Ed Kirstatter: I am now working on scratch building a B&O SF-22 Snow Flanger in S scale.

See the photo above of an HO-scale model built by the late J.W. (Barney) Barnard of Shelby, Ohio that I now have. [This one was on page 26 in the famous September 1962 Model Railroader article featuring “One Man’s Roster.” It didn’t make it to the estate sale in Avalon because Ed says Barney’s wife gave the car to him for helping to organize the estate for its trip east. JT] He only worked to build this using slides I took of it at Foxburg, Pennsylvania in 1959. Didn’t take enough! My S model will be made mostly from wood with brass for the plow. It is close to being finished and I’m writing up an article for the NASG Dispatch magazine. The B&O built this in 1924 from a S-15 Rodgers Convertible Ballast Spreader. I have a B&O diagram for that!
Below are two shots of SF-22 in HO from the John Schletzer collection. John used an Athearn flatcar, a Tichy house and side boards and an AHM plow (from a plastic model based on MR drawings of a Milwaukee Road car I think.) JT

Yes, the B&O is alive in Bavaria!
Below are a number of communications and model photos from reader Robert Goernig in Bavaria; all photos are by Robert:

Coal Valley Station
The model is based on an article that was published in Model Railroader’s July 1983 issue. The prototype is a small B&O Station with a dimension of only 16' 1" by 12' 1" and a height of 14' 5". I liked the tiny structure the first time I saw it, and it also became my first wood structure project. The original station sign in the MR article was "Eden".

I have checked my Railroad Atlas and found a place named Eden, Pennsylvania. Further investigations showed that it originally belonged to the Wilmington & Western Railroad (W&W). According to the history information provided on the W&W homepage (http://www.wwrr.com/about/history.asp), the line was purchased by the Baltimore & Philadelphia Railroad (B&P), a subsidiary of the Baltimore & Ohio, in the 1880s. The line became known as the "Landenberg Branch" by the B&O and was, for a time, its most profitable branch line. When a resort opened along the railroad in the late 1880s at Brandywine Springs, the passenger business flourished only to be discontinued on September 28, 1930, a victim of the Great Depression. Shortly thereafter, the Pennsylvania Railroad discontinued its connecting service to Landenberg. With trucks and automobiles gaining in popularity, the Landenberg Branch saw a sharp decrease in freight traffic, and the line was shortened to Southwood, Delaware in the early 1940s. After the demolition of the large Broad Run Trestle and growth of residential development after World War II, the line was again shortened to Hockessin, Delaware in the late 1950s. [Of course the Wilmington & Western is now a tourist line which we rode on during our 2010 Convention. JT]

As the structure is located close to a coal mine on my HO scale B&O layout, I renamed the station "Coal Valley". The majority of the building is made out of wood. The siding material is "capped siding" from Northeastern and the edges and framings are from small stripwood pieces. The two windows are out of the scrap box from an old Kibri model. The door is completely built out of wood as I did not have a matching door available at that time. For the roof I used 600 grit sanding paper to simulate the tar paper. The chimney is made from styrene, simulating brick stones. I completed the model by attaching a time schedule showing the eastbound and westbound trains. Actually there are only 2 passenger trains a day in each direction on my layout as mostly it is coal traffic. Waiting passengers can also find a Coke machine if they are looking for refreshment. The base is made out of styrene to simulate a concrete foundation. Recently I got hold of some desks and chairs, which I used to complete the station also inside. On the station manager's desk a telephone, a lamp and a typewriter for filling out the Form 19s can be found. All photos by the author: Thomas Goernig
Bahnweg 21
85229 Markt Indersdorf
Germany
And more from Thomas:

**B&O Privy**
This privy is a small but quite important building for the employees of the Baltimore & Ohio Railroad. The drawing of the privy can be found in the *Baltimore & Ohio Railroad Standard Plans for Maintenance of Way and Construction*, issued December 1907. The H0 scale model of the privy is based on drawing No. 7624 dated November 14, 1906. The basic dimensions are 4'-6" by 4'-6" and the height is 7'-6". The model of the privy is made out of wood. The siding material is "capped siding" from Northeastern and the edges and framings are made from small strip wood pieces. One side of the privy has louvres for visual screening and ventilation that is build out of small wood stripes. The door is completely built out of wood to match the prototype door. The door has working hinges and can be opened by pulling on the brass door knob. The flowers that are attached inside of the door are a suggestion of my wife to control the odour. For the roof I used 600 grit sanding paper to simulate the tar paper. The cast iron smoke stack is machined out of brass, following the prototype drawing. The base is made out of styrene to simulate the concrete mud sill and the concrete step. The floor is made from small pieces of strip wood. The privy also has a complete interior and two small boxes that can be pulled out at the rear, as on the real prototype. The outer visual screening is made a little bit simpler than compared to the original drawing. This is a compromise regarding visibility of the interior. The model resides at a siding on my B&O layout close to an abandoned station as a comfort for the crews that are stopping here.

[At the October 2019 Timonium Great Scale Train Show, I gave Don Tichy a copy of the Privy Standard Plan and suggested his company might produce a kit of this seemingly popular lineside structure. JT]
B&O Fire Hose House

The fire hose house is a small but very important building during the steam area of the Baltimore & Ohio Railroad and could be found on all major yards of the railroad. The drawing of the fire hose house can be found in the Baltimore & Ohio Railroad Standard Plans for Maintenance of Way and Construction, issued December 1907. The HO scale model of the fire hose house is based on the drawing No. 7686 dated November 14, 1906. The basic dimensions are 6’ by 6’ and the height is app. 8’ 6”. I found B&O fire hose house decals from B.T.S. #22718, which fit perfectly to the finished model, and as there where 4 sets in one decal set, I decided to build 4 houses. [BTS also makes a kit for the fire hose houses but without opening doors. JT] The model of the fire hose house is made out of Evergreen styrene siding for the walls and styrene sheet and strip material for the roof. I painted the walls with “fire red” and the roof aluminium, simulating the tin roof. Some slight touches of rust paint gives a perfect simulation of the aged tin roof together with some small weathering of the hinges. On one fire hose house I decided to leave the doors open, to also show the interior, which is completely scratchbuilt. The models are finally placed in the freight yard of my B&O layout.
And last but not least from Thomas:

**Marine models**

One other thing came to my mind, what do you think about a future issue of *B&O Modeler* that covers mainly B&O marine equipment? Attached are pictures of models I scratchbuilt based on plans from an earlier article in a *B&O Modeler*, and the stick lighter was built after a plan that showed up in *Railroad Model Craftsman* some years ago. It has a steam donkey, a captain and a cat. The steel car float is a modified Walthers float (enhanced deck fittings and details) and the "wood car float" is entirely built out of wood, except the metal parts, which are made out of brass, following an article in the *B&O Modeler*. By the way, you and I have been discussing about the ventilation of the hull of such wood floats. I finally solved the issue by using wooden grids on the deck, which you can see in the center of the wooden float. In German it is called "grating", as an English translation I found "grating", but I am not really sure about it. [same in English and German JT]

It is very encouraging to see modelers actually building projects that have been featured in the enthusiast press. Of course, we have had marine material in The Modeler in the past, as a look at the Modeler Index will reveal. Much of it was contributed by Tom Griffiths, based in some cases with drawings and material from the “Rail-Marine Information Group archives.” It’s a great kick when the published material serves as an inspiration and useful resource to other modelers. I haven’t heard from Tom in a while, but at one point he was threatening to scratch build a full hull model of the steam tug Hugh L. Bond, Jr. But if and when someone builds and writes up something about models of B&O’s floating roster, we will be happy to feature it in The Modeler. I started building the Frenchman River resin tug kit several years ago (B&O’s diesel tug Lehigh) but got stalled when I started working on the pilothouse interior—which is soon to be available as a 3D kit from Paul Strubeck. Hey, how about a model of the Locust Pt. transfer bridges? Recorded by the Historic American Engineering Record, HAER MD 180. JT
Decals for the Dockside  

[Note, due to the irregular publishing schedule of The Modeler and the limitations on the Modeler staff to research inquiries, questions about resources are probably best placed on the on-line discussion group, recently moved over to Groups.io. However once in a while the planets will align and in this case we were able to get a timely response to Daniel. JT]

From Daniel Raver: Are there any HO scale decals for lettering the C-16 “docksider” locomotives still being made, or were there any made for it? I have not turned up anything in my internet searches that specifically answer the question, and the tiny space available on the saddle tank for the full name to be written makes it look like it will need something different from lettering for the much larger tender sides of the other steam classes.

Ed Sauers offers the following:
The opening between the steps on the C-16 is 11’6”, the shortest spelled out Baltimore and Ohio on my set is 12’ but there is enough space between the lettering that you could easily make it fit by removing a little bit of the space before and after the “AND”

Bill Hanley (Wildwood Station) stocks my decal sets and still has some from my previous run in stock. Please contact Bill at wmhanley@verizon.net
And Bruce Elliott shares the following: Micro Scale makes the decals you're looking for. I attached a photo of a Rivarossi model that I detailed and lettered back in 2000 using the Micro Scale decal set 87-83. The locomotive should be numbered 898. I had inaccurate information at the time. Most people know this locomotive as #98. It received the three-digit number with a renumbering to make room for diesels. Ed Sauers also makes a decal set for steam and it is worth having if in this case for no other reason other than it has the C-16 class lettering that would go on the cab itself and the oil and water capacity on the oil tank end. I have attached this email to Ed so that he might be able to get you on a list of people that will be buying his third order for these decals. At this time, he is out of stock and taking advanced reservation payments for a new set.

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

“Dilworth’s Ugly Duckling Gets Makeover,” by David Otte, Model Railroad News, August 2019, pages 60-66. This review covers a Walthers Proto series GP-7. Samples reviewed include a PRR unit as well as a B&O “passenger unit” with air tanks on top (so-called torpedo boat) decorated in, what else, the classic blue and gray scheme. Claimed to be Phase IIb. You think they will do another run in the later blue with big yellow stripe scheme? How about Sunburst? Anyway, being a Proto series model, detail level is good. The grab irons and lift rings are now metal instead of plastic. The contour of the hood has also been improved since the Life Like days. The review even gives some history about the “Proto” line itself.

“1,2,3…Rapido’s Absolute RDC,” by David Otte. Model Railroad News, September 2019, Cover and pages 39-48. Comprehensive review, as only MRN does ‘em, of the latest Rapido RDC run covering the RDC-1 (coach) and RDC-2 (combine) set purchased by the Santa Fe. Article has another nice capsule history of the RDCs and history of the subject pair, the only RDCs owned by the Santa Fe. The RDC-1 was sold to the B&O in 1970 and operated for a time in Pittsburgh. Who is willing to comment on what modifications would be needed to B&Oize the Santa Fe unit? Have any of our readers actually purchased one of these? Can we assume Rapido will never do the “diner” version of the RDC-2 (one of which is available for Rapido’s crawling inspection at the Museum)? Is this Santa Fe unit the closest we may come to an accurate B&O RDC fleet member?


“Big-time modern railroading in the East,” by Bruce Friedman. *Model Railroader*, October 2019, pages 28-35. “This 42x56 foot layout is set between Philadelphia and Baltimore,” begins the article by Bruce. The layout depicts a portion of the B&O system that doesn’t seem to be too commonly modeled. Mainline run is said to be 1000 feet. Era modeled is “modern day” so I guess that’s why I didn’t see any models of those distinctive Frank Furness stations in the photos of the layout.

“Test Weight Car from Bachmann,” by Tony Cook. *Model Railroad News*, October 2018, pages 72-75. Review of the latest HO model scale test car with 11 photos and reproduction of scale drawing. Illustrations show how Bachmann has cleverly molded the dorsal railing provided with the undec version to accommodate various different prototypes. Includes photo of several B&O cars. My only complaint about this product is that it has cast-on not separate wire grabs. At least the cast-on grabs appear pretty low relief and should be quick to shave off if desired, maybe even without damaging the finish on the B&O lettered version. Look for some great articles on track scales in a future *Modeler*.

“Bachmann HO Twin-Bay PS-2 Covered Hopper, Penn Central Premium Silver Series,” by Dennis Snyder, *NMRA Magazine*, November 2019, pages 40-41. I believe this Pullman-Standard covered hopper model from Bachmann came out over a year ago, and I wondered what they were thinking, so I eagerly read this review hoping to find some insights. Recall that the old Model Die Casting/Roundhouse PS-2 covered hopper with cast on grabs came out decades ago and is available cheaply in the secondary market. Eastern Car Works sold a replacement roof that had the outboard roof hatches near the ends so you didn’t have to carve and fill the original roof. Then there is the state of the art Kadee version. The Bachmann car is in their “Premium Silver Series” So my question when I first saw the Bachmann car advertised was “why pay [list] $50 for this Bachmann car when you can get the Kadee car for the same or less?” The reviewed car is not a B&O one but is painted green and lettered for Penn Central. The model photos do a good job of showing a decently detailed model. (I say this because when MRN reviews a yellow product it is often hard to discriminate the details in their photos, and with all the UP stuff, they run a lot of yellow photos.) However it is clear that Premium Silver Series means cast-on, not wire grabs and sills steps, no cut levers, no air brake piping but with metal wheels and a fairly thin see-through running board. Kadee would be my choice. Am I missing something?

“Baltimore & Ohio 70’ Baggage Mail Car,” product review by Justin Sobeck in *NMRA Magazine*, July 2019, pages 31-32. This N-scale model from Micro-Trains received an NMRA Conformance Warrant due to passing enough of the NMRA’s Conformance and Inspection Standards and Recommended Practices. Unfortunately this just tells you the couplers, wheels, clearance and journals passed as the NMRA’s Warrant Program but does not address prototype conformance and there is no discussion in the review of “B&Oicity.” Road number on the review sample car is 229 and the one broadside photo provided shows this to be an attractive model. A more comprehensive review of this model from one of our N-scale RPO authorities would be most welcome.
What a controversial new model! Athearn Genesis has just brought out three B&O 2600-cubic-foot Airslide covered hoppers, and the reaction from modelers is all over the place. While some are more or less happy with the HO-scale cars, others who are inclined to be rivet counters are slamming the cars for a whole range of omissions and commissions. The truth may be somewhere in the middle.

Airslides Come To the B&O
Car builder General American came up with a revolutionary new covered hopper in 1953. General American implemented a technology incorporating special linings in freight cars that allowed powdery substances like flour, starch, and sugar to be unloaded using air pressure. Up until then, these commodities had been mostly bagged and shipped in the ubiquitous 40-foot box car. The Airslide cars could be unloaded a lot faster, and there was no need to use expensive bags to carry the lading. Some shippers found they could use Airslides for various powdery chemicals, and one railroad even tried it for cement—with decidedly mixed results for that product. The car looked vaguely like the early covered hoppers of the day except that it had two sloping, triangular trough sections underneath that were separated by the car’s center sill. Each trough had its own discharge gate. There was some piping on the sides of these “triangles” to introduce air for unloading.

General American was big on leasing freight cars, so, at first, most Airslide cars were leased to railroads or private companies that handled sugar or flour. The B&O saw that the cars were working out well and decided to lease 5 cars that
were built in December of 1955. Managers and shippers liked the cars, and the railroad decided to buy them in the summer of 1956. The GACX reporting marks used by General American were painted over and replaced with “B&O.” The cars were re-numbered to 242391-242395. The railroad probably painted out a triangle with “General American” in it and may also have added a large B&O in the center of the car side. Unfortunately, photos of these cars are not to be found, although one may “surface” on the Internet someday. See the nice article by Jim Rogers in the Fourth Quarter 2011 Sentinel for some additional history and great photos of the B&O Airslides.

B&O leased around 10 additional cars in the 1950s, initially numbering them in the 24xxxx series but moving some to other numbers later. Five of the cars built in 1956 became the N-45 class and received car number 83000-830004. The cash-strapped railroad finally splurged on 45 new GA 2600 cubic foot Airslides in 1960. These cars, B&O 830005-830049, became the N-47 class. In 1970 the N-45 and N-47 Airslides were put into the new HC-6 class together with some similar cars from C&O.

Still more Airslides came in 1963 and 1964. The 75-car N-47A class consisted of B&O 830050-830124. (These later became the HC-8 class.) The car bodies of the N-45, N-47 and N-47A were almost identical. There were differences in the grab irons and safety appliances employed, as well as in the types of trucks. Around 1964 B&O decided to go with a longer, two-trough-per-car-side, “double” Airslide car from General American. These bigger Airslides had a capacity of 4100 cubic feet. No further 2600 cubic foot cars were ordered by the B&O, despite other railroads continuing to buy “single” Airslides, as the 2600s came to be known.

Now all of these B&O cars were basic gray with black lettering. There were at least five different lettering schemes: The former leased cars with painted-over GACX reporting marks; the scheme with a large B&O in the center of the car side and the words “BALTIMORE AND OHIO” above it; the scheme with only a large B&O in the center; the scheme with the large B&O but also with a Capitol dome in the second panel from the left; and a gray repaint scheme that, unlike all of the previous schemes using Roman lettering, used the so-called Futura demi-bold lettering and numbering and had no big “B&O” but did have a Capitol Dome in the second panel from the right. In 1973 the repaint scheme became the eye-popping Chessie System yellow with blue lettering. Many of the bedraggled, patch painted gray cars took on a new, striking image. By 1987, the remaining single Airslide cars were assigned a new CSX number series, but I have found no photos of CSX repaints to date.

**HO-Scale Airslides: The Good, The Bad, And The Ugly**

**E&B Valley/Eastern Car Works** Time for the modeling section. E&B Valley was the earliest styrene kit producer of an HO Airslide car. The tooling was taken over by Eastern Car Works. I am not aware that the company decorated it for B&O, however. The kit was a difficult-to-assemble flat kit—I know I gave up on mine—but looked fairly good when a patient and talented modeler put it together. Please see the image of a PRR version assembled by Modeler editor John Teichmoeller.

**Walthers** William K Walthers produced an injection molded 2600 cubic foot Airslide kit with a partly assembled main body and did offer B&O versions. As part of my penance for getting involved with this review, I bought one of these kits on E-Bay and suffered through assembling it. The brake gear and roof parts are ill-fitting and difficult to assemble. A special cross to bear were the circular knobs representing the
hinged palm nuts used to tighten down the roof hatches on the real car. These knobs were molded—unprototypically—as disks perched on stalks that penetrate the roof of the model car. I had to enlarge numerous holes and file the hatches to get all of these pieces together. The running board (roof walk) is very much old school on this Danish-produced kit. It was difficult to get the roof to seat properly, and I needed to rework the coupler boxes and use different trucks. The ladders and grab irons are molded on. The basic B&O paint and car lettering were not badly done, although some of the car data like the Light Weight are off a bit. However, Walthers decorated each of their car models as a Class N-47 that had been refurbished at the East Chicago, Indiana shop of General American in 1976. The model was given the appropriate two-box consolidated stencil that a car of that era should have had. It also has some modified lettering more appropriate for 1976 rather than an as-built car. You can NOT backdate the lettering on this car to make it resemble a 1960s car, I’m afraid. It is, however, a perfectly good car for a late 1970s to 1980s modeler. I put a set of Barber S2A trucks on my model. The Walthers kit had roller bearing trucks that were not what the prototype car was built with. Plano makes a replacement running board that can be used to doll up the model a bit.

**Con-Cor** Con-Cor has also produced an Airslide in HO-scale. The model is a little nicer than the Walthers in some respects. The roof is molded onto the basic car body and looks a lot neater. The hatches, while not beautiful, are not the Rube Goldberg type in the Walthers kit. Con-Cor uses molded on grab-irons and ladders, however. Con-Cor is capable of doing a good paint job—I acquired a fairly nice N&W Airslide—but, as far as I know, they have not produced a B&O Airslide. Con-Cor offers an Airslide close to a B&O car but also a later single Airslide body style that our favorite railroad did not have. Some of the Con-Cor cars decorated for other railroads or private owners can be found at train shows or ordered directly from the company.

**Athearn** Now for the main course. In early 2018 Athearn announced an HO Airslide and released it in late summer of 2019. Their Airslide model is far superior to the ones we have discussed to this point. As far as I can determine, the model is pretty close to the cars made by General American in the 1958 to 1964 time frame when B&O acquired most of its
The B&O Modeler  22
Number 50

single Airslides. There are a couple of inconsequential raised panels molded on for ownership stencils and such that were not on B&O cars, but I challenge you to find them. The Athearn model’s roof and hatch detail are excellent. There is a separate metal Apex running board. There is simulated piping connecting the brake components. There are individually-added grab irons and ladder rungs. The stirrup steps are added on pieces, although these can fall off or break (the modeler is advised to hit each with a needle-eye spot of CA). There are coupler cut levers. The trucks are good, roller bearing ones and there are good knuckle couplers. The cars are ready to run. And Athearn has made B&O cars with correct car numbers! You can buy B&O 830099, 830117, or 830168 and put them right on the rails.

So what’s not to like about these? Well, I’m afraid that, as with the Walthers car, people looking for as-built or early 1970s cars will not be happy. First of all, the color of the cars is a very light gray, one which might be appropriate for an older car with faded paint, but not for an as-built car. Next, Athearn evidently tried to do what Walthers did: produce cars based on 1970s or 1980s photos. If you look around a bit, you can find all three of the photos that Athearn used. What these photos have in common is that all of them featured cars that had a lot of re-stenciling and paint outs applied. When the railroad needed to add ACI car identification labels to Airslides in the late 1960s, it would appear that it was easy to just paint gray over the last panel to the right on a B&O Airslide and add the label there. Some of the information that had been there was relocated. The problem was aggravated when two-box consolidated stencils were adopted in the latter half of the 1970s. Again, railroad or GA shops were tempted to simply paint over what they saw as superfluous or obsolete data on the Airslides. Sometimes the far right panel was commandeered, sometimes other panels were used.

Now Athearn has no doubt heard complaints from some 1960s modelers who have complained about having ACI labels or black data boxes on cars that did not have them when built. In the case of say, a box car, you can simply leave off the consolidated stencils and it’s pretty likely that the original lettering will still be on the car. So, the manufacturer might have a good photo of a box car taken in 1975, and their artists can backdate the car to its original 1965 appearance.

This kind of approach did not work with the Athearn B&O Airslides. The artwork for the three cars mostly reflects the late 1970s or early 1980s lettering in available photos, but the ACI labels and prominent black data boxes were left off. Evidently the artists did not know what kind of information was on the panels before they were painted over. Therefore they either left the lettering off or made a half-hearted attempt at putting some of it on. It’s not necessarily the case on these cars, but many Airslides were sent to General American for new linings, and rather different stencils were applied describing these. Some of these lining stencils were not even in the same panel as on as-built cars. The B&O Airslides just got dirtier and dirtier and were given more and more gray and black paint patches. A 1985 photo of a rather mangy B&O 830009 shows that at least seven of the panels have an ugly black or gray patch. There is even a wheel dot just above the right sill step!
Discussing Athearn’s Three Offerings

Let’s do a blow by blow analysis of the three model cars.

830099
The first car modeled was N-47A B&O 830099, whose prototype was built in August 1963. The model is a very light gray. The black B&O reporting marks and numbers are in the right font and look good. The large “B&O” in the center of the car looks good. There is a nice-looking simulated “AIRSLIDE” sticker in the upper right of the car side. Some of the appropriate stenciling on car linings is there. Now for the bad news. The car is stenciled as “NEW 7-64” which is wrong. This same bad month and year is incorporated into the stencil in the second panel from the right, which otherwise is not too badly rendered. If you want to get picky, B&O did use slightly different admonitions on how NOT to clean the interior of the car. Left off are the lettering in the panel containing the large “O”. Low down in that panel you would expect an ownership stencil on top and a RETURN EMPTY stencil below. From the photo (with some help from other photos) you can see that the return stencil was:

WHEN EMPTY RETURN TO
CMST P&P
MINNEAPOLIS MINN

This same “return to the Milwaukee Road” stencil is found on certain other B&O Airslides. Incidentally, additional destinations seen on B&O Airslide return stencils include East St. Louis, Illinois; Fostoria, Ohio; and Philadelphia, Pennsylvania.

The Athearn model of 830099 leaves off the Consolidated Stencil and ACI labels that were in the far right panel of the car as of 1982. The artist decided not to reconstruct the original lettering in that panel, instead opting to put on “N-17”. Many of you will know that an N-17 was the USRA class coal hopper on the B&O. Not that the B&O never re-used empty prior classes—e.g. W-3 hoppers. I suppose putting on a simple “N-47A” would have been OK, but a lot of other data would be left off. An as-built model should also have had a lubrication stencil and date on the side sill to the left of the car ladder. Whichever version of the car you want, I forgot one thing. I neglected to point out that the car type stencil says “LD” instead of the correct “LO” indicating a covered hopper.

The Athearn model is neatly lettered but the gray is light. The N17 was somebody’s stab at a very dirty “N47A” marking on the prototype photo of a very grungy car. Unlike the Walthers model, the Athearn model has separately applied grab irons. They look nice, but all but six of the grab irons should have been straight and not drop grab irons. Now the Walthers car, as a model of an N-47, would have benefitted from having almost all drop grab irons. Mike Shylanski photo.
There is a strange twist on this 830099 model story. Some years ago, Microscale offered a decal set, 87-434 that contained partial Airslide lettering for a car each for the CB&Q, CNW, Wabash, L&N and the B&O. The B&O car was numbered, you guessed it, 830099. The lettering is based on the 1982 photo that Athearn appears to have used. Unfortunately, the now-discontinued Microscale set left a lot to be desired. The ampersand in B&O is bad, the proportions on the car numbers are wrong, and the consolidated stencils are just plain weird. On the other hand, the set does have a return empty to Minneapolis stencil as well as a weigh station symbol of EC-10-81. Microscale attempted to do the HOME ROAD FOR REPAIR stencils that were on the Airslide when it was captured in 1982. Now if you model the late B&O, you can get a copy of the former 87-434 at a train show or on the ‘net and make a fairly decent replica of the dirty, hurt car that was shopped in 1982. You would NOT be able to backdate the Athearn car to a 1963, as-built appearance.

As a postscript, I was disappointed to see that the model (and its brethren) has certain wrongly shaped detail parts. The model of 830099 has a lot of separately applied drop grab irons and drop-style ladder rungs. Unfortunately, almost all of these should be straight and not drop grab irons. The car had four drop grab irons only—all at the bottom of the tall ladders. Ain’t it a shame that all of those factory workers put the small parts on the car, and they used the wrong parts. The N-47 class did have mostly drop grab irons. (The left side ladders had straight grab irons on these B&O cars.) If another run of B&O Airslides is done, perhaps they can get the mix right.

830117
Now for the model of the 830117. The model is lettered in a fashion very similar to that of the previous car we discussed. The prototype photo used shows gray paint and dirt all over the car. A lot of the small lettering is painted over. You can just barely see the N-47A, but unfortunately the Athearn artist thought it was an N-17. You modern modelers might be able to create a very dirty, circa 1980 rendering of this car. Again, you as-built people are left out.

830168
Finally, let’s do the Athearn model of B&O 830168. Many of you will have noticed that the prototype of this car is pictured in the B&O Color Guide. Note the now obsolete, partly painted out data in the second panel from the right. In my opinion, this photo is a tad washed out. This is the lightest gray I have seen on a B&O Airslide. Have a look at the Airslide just above this one in the Color Guide. The gray is quite different.

This model bears—correctly—a later lettering scheme that omitted the “AIRSLIDE” sticker but included a nice black Capitol Dome in the second panel from the left. Much of the data that is on this model is good. The dates are correct for an as-built car this time. The “LO” is rendered properly. The bad thing is that the two rightmost panels of the car are
blank. That just does not look like a B&O car to me. Again, you modern modelers can put boxes of data, a wheel dot and other detail into this location and weather the car heavily. You can make a good-looking model out of this one. And, yes, the grab irons are almost all wrong again.

So, to recap, the light, weathered looking gray of the three cars and the bare or incorrect lettering in the far right panels can be minor hurdles for late B&O modelers who like to weather and decal cars. You 1960s fans are left out for now. There are several very good photos of as-built or nearly new Airslides in the B&O Railroad Historical Society collection. (I am unaware of whether any B&O freight car experts were consulted by Athearn on this offering. To date at least nobody has spoken up.) The Society stands ready to share these with Athearn and work with that company to do a second run of these cars that will be better in many ways.
Remediation Notes
I printed out the Athearn advertising artwork for this car when it was published in early 2018, holding it in my “pending products—keep pestering the hobby shop” file. The artwork showed class N-17. Surely, I thought, they will fix that on the issued model. Wrong. Now the other lettering discrepancies Mike points out don’t bother me, partly because in my 11/1967 modeling era my observation is that a distinct lack of rigor in B&O equipment markings had developed. But partly because the N-17 is such a well-known class (USRA hopper), I just had to fix the class designation. I didn’t have any tiny black Roman letters but I did have “Microscale 87-70-2 RR Gothic Letters & Numbers Black.” I pasted the “4” over the “1” using the next-to-smallest letting in the Microscale set and added a “A” using the smallest letter. I probably need to nick off the top serif of the “I” that sticks out with a sharp X-ACTO blade.

The other problem was a sizeable and noticeable expansion pucker in the running board. This is not unheard of with those nice metal running boards. The pucker was too large to just glue it down, so using an X-ACTO knife, I had to release the pressure. I carefully broke the bond from the pucker to the end. I then used teeny dabs of Barge Cement on each walk support to rebond the running board in place. The end one with the diagonal bracing didn’t pop off readily and I was concerned about screwing things up, but a dab of acetone loosened it successfully. With Barge Cement I am challenged with the webs of cement that you create the minute you open the cap, although the “blue tube—no toluene” flavor seems to be less troublesome than the green and red tube type.

John Teichmoeller
MODELING THE SUNBURST DIESEL LOCOMOTIVE SCHEME
BY JOHN TEICHMOELLER BASED ON RESEARCH BY DWIGHT JONES

Introduction and Background
Many B&O modelers are aware of the so-called “Sunburst” painting scheme used on the B&O’s diesels. The basic Sunburst scheme is characterized mainly by a) a large X-shaped graphic on the front (and rear when appropriate) of the locomotive with a Capitol Dome emblem in the center of the X, b) a “dash” graphic along the side sill and c) abbreviated Roman-style “B&O” on the sides of the locomotive and road number on the cab side. (Naturally there were precursors and later variations.)

Full credit must be given for the information in this article to work by Dwight Jones, assisted by Harry Meem, Nick Powell and members of the B&O Yahoo list. Among other things, this project was intended to yield answers to the following questions:
1. During what period of time was the Sunburst scheme applied?
2. How long did the scheme remain on operating locomotives before being painted out?
3. What types of locomotives received the scheme?

Dwight is not aware of any definitive articles in the enthusiast press on this scheme that address the above questions of modeling interest. Rather than wait to publish when all information has been collected—or the Rapture whichever comes first—it is the purpose of this article to provide some insights into this scheme and address these questions. This article is not intended to be the final story. Indeed it is hoped that readers with documentation that can resolve the as yet undefined issues will share their information. The objective, after receipt of any reader feedback and corrections, is to post a revised version of this article in the “Paint and Lettering” section of the Society’s website where it will live along with other paint and lettering information already there as a resource to future modelers. Also, the CD with Dwight’s work including his PowerPoint ® will be deposited in the archives in Eldersburg.

Finally, in addition to addressing the above, this article will offer brief commentary on commercial production HO models sold decorated in Sunburst as well as available decals.
The project achieved its completion (at least its initial phase) during 2018 when Dwight made a presentation at the Society’s Dayton convention that contained the fruits of his research. This article simply attempts to summarize the key findings of Dwight’s work relative to the above questions. It should be noted that Dwight’s program went beyond the scope of this present article and included information about “antecedents” and “variations” of the Sunburst as well as a number of other fascinating “side stories.” His research approach was also admirable and is a great example of wringing answers from history in the face of a lack of documentation. (If Dwight offers his Sunburst presentation at some future time, you are encouraged to view it if possible.) This article is merely focused on information important to the modeler interested in “probability modeling” the accurate physical fleet in time.

**Application: During what period of time was the scheme applied?**

It would be great if company memos existed listing on a monthly basis the diesel units that were scheduled to be painted Sunburst and a cumulative list of those which had been painted. Additionally we would have more memo reports systematically listing when units lost their Sunburst scheme. But alas, we’re out of luck; no company memos have surfaced ordering start date and/or unit application of the Sunburst scheme. We can, however, piece together some extant documentation and photographic evidence to gain some insights. For starters of course, the scheme appeared on the new batch of 77 GP30s and drawings for this exist. These were delivered from October of 1962 to January of 1963. The next batch of diesels, GP35s, did not bear the Sunburst and were delivered starting in March of 1964. So a “primary cut” of “Sunburst Application Period” is from October 1962 to February 1964. This period can be further refined. In addition to an indicated application time span of October 1962 to February 1964, there are photographs of several units showing Sunburst dated prior to October 1962, so the scheme had begun appearing by April of 1962. There is limited documentation about what happened in 1963 and early 1964. However, Dwight had access to the contents of a memo from the Cumberland Shops that lists units that had been repainted into Sunburst. This memo itself is known to be incomplete because it omits passenger units. In addition to the units on that list, the research team collected dated photographs showing additional units that were not on the Cumberland list. Another memo from 7/12/63 specifies F, FA and E units that were to be repainted. So we can even further refine the Sunburst Application Period as approximately 4/1962 to 2/1964.

**Duration: How long did Sunburst scheme remain in service?**

Again, no company memos have surfaced scheduling or listing units to be repainted out of the Sunburst after March of 1964. Lacking documentary support, Dwight’s efforts turned to an examination of available dated photographs. What does this tell us?

Dwight compiled a list of total of over 150 units (he intends to update his “master list” as he discovers new images, so this count will grow—the most recent he tells me is 159). The accompanying Table A lists these—units listed on the above-mentioned memos and collected photos. In the interest of compactness the table does not include the 77 GP30s. Table A lists groups units by diesel type class in unit number order. This brings us to a total of 236 known Sunbursts. Dwight states the B&O rostered 833 diesels in 1963. It is probable that more than 236 units received Sunburst; Dwight feels there were at least 250.

At first blush it might seem reasonable to assume, for example, that missing numbers from the “blocks” also received Sunburst. For example, on Table A, E-7s 1419, 1422, 1424, 1426, 1427 and 1428 are listed. Would the railroad have allowed 1420, 1421 and 1423 to avoid the Sunburst paint shop? So, perhaps yes. Dwight feels that the painting into Sunburst was NOT comprehensive by road number block due to the declining financial condition of the company. Instead, individual unit mechanical requirements that brought a unit in for a shop visit would have been the trigger for a painting opportunity rather than a set schedule. But of course we can only guess lacking further documentation or photos of 1420, 1421 and 1423.

At of the units for which photographic evidence exists, not all are dated. So the best Dwight could do was to study the dated images, Dwight tabulated the following data which shows attrition of Sunburst units still in service over time: 1965: 23 units; 1966: 7 units; 1967: 4 units. There were none observed in 1968 images. In addition, Jim Mischke, in a posting from the Yahoo list, has observed that the Sunburst passenger E units were all repainted out of Sunburst by 1965. Perhaps this was due to their more public image. It would seem the attrition of the Sunburst scheme into the subsequent and simpler Capital Dome nose emblem/wide yellow sill stripe was more rapid than normal diesel repainting practice would suggest.
(In any event, if you are modeling after 1967 you probably are stretching it if you roster a Sunburst, and if you do it should probably have a well weathered paint job.)

Why the short life span of the scheme? Dwight’s program addresses this question which of course is of railroad historical as opposed to modeling interest, but it always seems to come up anyway. Again, lacking documentary evidence, one argument is that by 1964 C&O influence in motive power management and image reflected in paint schemes was predominant. Also there is anecdotal evidence that President Jervis Langdon, Jr. particularly disliked Sunburst. Maybe some future research will discover a “Sunburst Death Warrant Memo” in the Langdon papers.

**Application: What types of locomotives received the scheme?**

Based on road numbers of units listed on Table A and photos, we can identify the following diesel types: E6, E7, E8, E9, GP7, GP7 passenger, GP9, GP9 passenger, AS16, FA2, F3, F7, S2, VO1000 and, of course, GP30.

**Engineer Garry Pace and GP30 6944 at B&O Railroad Museum 9-28-19**

**GP7 6405 at B&O Railroad Museum, 9-28-19. Note cast capitol dome emblem.**

**Modeler’s Fleet**

How do we translate this into our model world? You can work out your own numbers, but as “bonus material,” Dwight offers a hypothetical Sunburst population in a hypothetical model fleet, assuming you are modeling in 1963 or 1964. Given a total diesel fleet size of 855 and estimated 250 painted Sunburst, we have a representative portion of ca. 30%. Given a typical “operational” model B&O diesel fleet size (we won’t count those PRR Centipedes you run on the layout sometime) gives 6 Sunbursts, of which 2 would be GP30s, the rest older units (Es, Fs or GPs).
Commercial HO Sunburst Models
Over the years a number of GP30 models have become commercially available decorated in Sunburst. Back in the early 1990s, Bachmann issued one of their early Spectrum series GP30 in Sunburst. Nicely detailed for its time, but unfortunately, this used the old Lionel tooling with the extended length fireman’s side cab. Oh well, you only look at one side of the loco at a time, so many modelers are not bothered by this. Bachmann reissued their Sunburst GP30 several more times, most recently in 2018, now with sound but with the same Lionel cab. (A nice comprehensive review of this model appeared in *Model Railroad News*, February 2018.) Life-Like issued their Sunburst Proto 2000 GP-30 with correct cab in the early 2000s. Unfortunately, these units as well as other Proto 2000 units, appear to have all been prone to cracked axle gears. Fortunately, this is an inexpensive and a fairly easy replacement exercise, $3-$4 for the set of 4 axle gears from A-Line or Athearn. (I guess my sole Proto 2000 Sunburst GP-30 No. 6972 is barely plausible for my 11/67 modeling period, but I’ll weather it heavily.) In 2006 Bowser advertised AS-16 road numbers 6203 and 6205 in Sunburst.

Perhaps our readers are aware of other factory-painted Sunburst models in HO and other scales.

Decals
The following decal sets in Sunburst are available according to Raymond Stern of Pro-Custom Hobbies:

**MCS-3006**—Produced many years ago by Pro Custom Hobbies now in Eldersburg, MD. This set, still available, does 2 GP30s. The Sunburst art is the same size for both ends. The capitol dome emblem is a separate decal part to allow for alternative application of a photoetched/cast representation part. The decal’s coloration is brownish orange as opposed to the bright yellow that has been rendered on commercial models. Raymond Stern of Pro claims this is correct and that this was the shade they were when newly painted and that they faded to yellow later. I have not actually applied these to a blue painted shell but having had some experience with decals other than white or black ones over the years I know some interesting results occur when they are applied to dark backgrounds.

**MSI-MC4053**—Microscale—This set is also for the GP30 and does one unit. The capitol dome emblem is integral with the Sunburst “X” element.

Raymond is certain that Champion Decals never produced Sunburst, nor has Bill Mosteller of Great Decals.

In addition, Yahoo List participant David Banes arranged to have a decal set for F7 units custom produced for personal use. He is not interested in commercial production.

Since Dwight does not consider himself to be a modeler (unless 1:1 scale counts), he did not discuss model decals or the issue of whether the geometry of the GP30 sunburst emblem is the same on other GP units or F units.
David Banes photos of his F7 with custom-made decals

### Table A - Known B&O Sunburst Units

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E6A</td>
<td>FA2</td>
<td>F7A</td>
<td>F7A</td>
<td>F7A</td>
<td>GP9</td>
<td>GP9</td>
</tr>
<tr>
<td>1410</td>
<td>4017</td>
<td>4530</td>
<td>4583</td>
<td>4645</td>
<td>6427</td>
<td>6569</td>
</tr>
<tr>
<td>1411</td>
<td>4018</td>
<td>4531</td>
<td>4585</td>
<td>4646</td>
<td>6428</td>
<td>6576</td>
</tr>
<tr>
<td>1412</td>
<td>4021</td>
<td>4533</td>
<td>4588</td>
<td>4647</td>
<td>6432</td>
<td>6583</td>
</tr>
<tr>
<td>E7A</td>
<td>4022</td>
<td>4534</td>
<td>4599</td>
<td>4648</td>
<td>6433</td>
<td>6598</td>
</tr>
<tr>
<td>1419</td>
<td>4028</td>
<td>4535</td>
<td>4601</td>
<td>4650</td>
<td>6442</td>
<td>GP9P</td>
</tr>
<tr>
<td>1422</td>
<td>4029</td>
<td>4538</td>
<td>4603</td>
<td>4651</td>
<td>6445</td>
<td>6605</td>
</tr>
<tr>
<td>1424</td>
<td>4036</td>
<td>4541</td>
<td>4605</td>
<td>4652</td>
<td>6446</td>
<td>6606</td>
</tr>
<tr>
<td>1426</td>
<td>4128</td>
<td>4544</td>
<td>4606</td>
<td>4654</td>
<td>6449</td>
<td>6608</td>
</tr>
<tr>
<td>1427</td>
<td>F3A</td>
<td>4545</td>
<td>4607</td>
<td>4657</td>
<td>6450</td>
<td>6609</td>
</tr>
<tr>
<td>1428</td>
<td>4461</td>
<td>4547</td>
<td>4609</td>
<td>AS16</td>
<td>6463</td>
<td>6610</td>
</tr>
<tr>
<td>E8A</td>
<td>F7A</td>
<td>4548</td>
<td>4610</td>
<td>6203</td>
<td>6466</td>
<td>6613</td>
</tr>
<tr>
<td>1433</td>
<td>4497</td>
<td>4549</td>
<td>4612</td>
<td>6204</td>
<td>6468</td>
<td>6614</td>
</tr>
<tr>
<td>1434</td>
<td>4501</td>
<td>4550</td>
<td>4613</td>
<td>6205</td>
<td>6475</td>
<td>6616</td>
</tr>
<tr>
<td>1436</td>
<td>4509</td>
<td>4553</td>
<td>4614</td>
<td>GP7</td>
<td>6477</td>
<td>6617</td>
</tr>
<tr>
<td>1439</td>
<td>4510</td>
<td>4557</td>
<td>4615</td>
<td>6400</td>
<td>6480</td>
<td>6618</td>
</tr>
<tr>
<td>1449</td>
<td>4511</td>
<td>4558</td>
<td>4620</td>
<td>6403</td>
<td>6482</td>
<td>GP7P</td>
</tr>
<tr>
<td>1450</td>
<td>4512</td>
<td>4561</td>
<td>4626</td>
<td>6405</td>
<td>6492</td>
<td>6696</td>
</tr>
<tr>
<td>E9A</td>
<td>4513</td>
<td>4565</td>
<td>4629</td>
<td>6406</td>
<td>6510</td>
<td>S2</td>
</tr>
<tr>
<td>1454</td>
<td>4515</td>
<td>4567</td>
<td>4630</td>
<td>6407</td>
<td>6511</td>
<td>9115</td>
</tr>
<tr>
<td>1457</td>
<td>4517</td>
<td>4568</td>
<td>4631</td>
<td>6410</td>
<td>6513</td>
<td>9147</td>
</tr>
<tr>
<td>GP7P</td>
<td>4518</td>
<td>4574</td>
<td>4633</td>
<td>6411</td>
<td>6528</td>
<td>S4</td>
</tr>
<tr>
<td>3400</td>
<td>4520</td>
<td>4575</td>
<td>4635</td>
<td>6412</td>
<td>6537</td>
<td>9180</td>
</tr>
<tr>
<td>3403</td>
<td>4521</td>
<td>4579</td>
<td>4636</td>
<td>6414</td>
<td>6539</td>
<td></td>
</tr>
<tr>
<td>3405</td>
<td>4523</td>
<td>4580</td>
<td>4644</td>
<td>6556</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MODELING B&O’S HISTORIC CLASS I-7 CABOOSE
BY BOB CHAPMAN

The Prototype
Wreck damage in 1930 to a B&O class I-5 wood-bodied cupola-style caboose was all the excuse that Superintendent of
Cars J. J. Tatum needed. Always innovating, Mr. Tatum took the opportunity to rebuild the I-5 into a new caboose style
being tried experimentally by only a few other roads at the time – the steel-bodied bay-window caboose.

Much of the I-5 from the underframe and below was retained, including arch-bar trucks, brake system, toolbox, and
platform steps; a major change was the addition of a Duryea cushion underframe. With the emerging trend toward taller
freight cars, the bay-window carbody was felt by some as the design of the future, replacing the cupola-style design. The
new experimental car rolled out of Mt. Clare shops in January 1931, was designated class I-7, and was numbered 2500.

Although one-of-a-kind and never repeated, the I-7 was fully successful, serving the B&O for 48 years until damaged in a
wreck in 1979. Over its career, it received minor upgrades including power handbrakes replacing the original staff brakes,
and AAR trucks replacing the arch-bars. It migrated through various B&O caboose paint and lettering schemes, even
wearing dark blue paint at the end of its life. It undoubtedly served as an inspiration for the I-5a wagon-top caboose design
of 1936, and shared design features with the boxcar-based wartime I-13’s and I-16’s, as well as the 1952-53 all-steel I-17
series. The I-7 was a true pioneer – both for B&O and the railroad industry.
The idea of modeling a B&O I-7 from the Varney carbody has been around for decades, but credit is due to Bruce Elliott for motivating me to take on the project. As B&ORRHS modeling committee chair, Bruce is always on the lookout for ways to model B&O rolling stock. It took only a photo of Bruce’s model, and I was hooked.

The Varney 1950 catalog (price, 10 cents) offered high excitement to the era’s modelers. In addition to Varney’s previous line of realistic stamped steel boxcars, reefers, and flat cars, new molded plastic models were introduced, including two-bay hoppers, covered hoppers, and the choice of a cupola-style or bay window caboose. (And who could resist the Varney ads featuring John Allen’s model railroad?) While the specific prototype for Varney’s bay window caboose seems lost to history, the carbody represents design elements from the prototypes of several roads, including B&O’s class I-7.

Rivet-counter alert – the Varney model is NOT a prototype model of the I-7. The carbody is a bit long and a bit wide; length over endsills is 31’9” vs. the prototype’s 30’0”, and width over the bay window is 12’2” vs. the prototype’s 10’6”. Window placement isn’t quite right, and there are extra seams in the sides. Despite these issues, the carbody has the look and feel of the B&O I-7.

Are we putting lipstick on the pig? Possibly. If these discrepancies bother you, scratchbuilding the carbody is a doable project, and many of the detailing options presented here will still apply. Or – if you’re looking for ready-to-run, there’s the Overland Models brass I-7 import from 1986 (see Second Section Commentary at the end of this article), but

Varney first catalogued its bay window caboose in 1950. For its era, it was considered a highly detailed model.
you'll pay several times the cost of the Varney project, and will miss the fun of doing the modeling.

After Bruce pointed out the modeling opportunity, I felt *déjà vu* that somewhere in my stash of “modeling stuff,” I had the needed model. Sure enough after extensive rummaging, there it was – an undecorated, unassembled Varney bay window caboose, given to me years before by a friend who was housecleaning unwanted items. I was in business! And note – if you don’t have the vintage Varney model, Model Power (MRC) currently catalogs a $10 reissue of the model, differing from the Varney with molded-on grabs and markers, and simplified platform detail. Either the Varney or Model Power carbody will work for this project.

**Prepare the Carbody**

Varney’s running board represents a steel grid prototype, incorrect for the I-7, and in toy-like fashion is molded to the roof. With medium to coarse sandpaper resting on a flat surface such as plate glass, drag the roof across the sandpaper until the running board is removed. The lateral walks are also incorrect for the I-7; carefully remove them with a mill file, being careful not to damage the adjacent roof seam and rivets.

The Varney carbody is pre-drilled for separate grabs and markers, oversized and incorrectly located for the I-7. I like to fill such holes with .025” styrene rod (Evergreen #219); drill as needed for them using a #72 bit, and glue the plugs in place. Slice the plugs with an X-ACTO chisel blade, and remove any unwanted molded detail from the site; smooth the area with sanding sticks.

A putty such as Squadron Green can also be used to fill the holes. Note that the Model Power carbody has many of these details molded on, requiring removal with an X-ACTO chisel blade.

The I-7’s end windows are about 18” x 18” excluding sash (note – mine came out a bit larger) and are located about 2’9” from the bottom of the end and about 1’3” from the edge of the side. Begin the opening with a drill, then square it with a file. The vertical cylinders molded into the interior carbody corners are a nuisance and must be filed to clear the window opening. Cut away the vertical mullion in the door’s window.

Using photos as a guide, drill (#78) for new grabs. Note that the side grabs were changed to a different style when the I-7 was updated, as was the brake system to type AB. I used Detail Associates #6503 for the side grabs, DA #6504 for the L-shaped end grabs, and DA #6505 for the slanted 36” end grabs. Drill for marker lamps of your choice; I used Precision Scale #31334. We’ll install the grabs and markers after painting.

**Build the Floor**

The Pullman-style steps in the diecast Varney floor are incorrect for the I-7. By building a new floor, we can not only correct the steps and their platform attachment, but also add a bit of needed height to the model. To be able to add window glass to the interior after painting, we’ll make the center portion of the floor removable.

The floor is .040” styrene sheet (#9040), flush with the top of two sidesills made from .040” x .125” styrene strips (#146). The floor is in three 8’2” wide sections with a total length of 30’1”; the two end sections are 4’0” long, and the removable center section 22’1” long. The sidesills are 30’8” long, with 3” overhang at each end. Glue the two end floor pieces to the sidesills, flush with their top.
The .020” V-groove end platform (#2030) is 8’9” wide x 5’0” long, glued atop the floor and sidesills, flush with the floor ends and sidesill sides. The end platforms will each provide a ledge for the removable center floor section. Drill (#50) for a 2-56 screw at each end of the center floor section and through the end platform ledge; follow with a clearance hole (#42) through each hole in the center floor section.

Cut an endsill from .040” x .060” styrene strip, to fit between the sidesills and butting against the floor and end platform ends. Notch the strip flush with the bottom of the floor to clear the coupler pocket.

Note that the prototype was equipped with a Duryea cushion underframe, which extends about a foot beyond the endsill at each end. I elected not to model this feature, since the typical extra-wide model coupler boxes not only don’t look convincing, but are actually distracting. The more serious modeler will want to scratchbuild narrow coupler boxes with very limited swing to match the appearance of the Duryea extensions; the short I-7 carbody will likely minimize any operational problems on switches and curves. On my model, I glued the top of the coupler pocket securely to the floor (not wanting a screw to poke through the top of the platform); I used Kadee #158 scale couplers, but their #5’s will also work.

**Detail the Underbody**

With the length of the model carbody at 25’4” vs. the prototype’s 24’0”, I elected not to model this feature, since the typical extra-wide model coupler boxes not only don’t look convincing, but are actually distracting. The more serious modeler will want to scratchbuild narrow coupler boxes with very limited swing to match the appearance of the Duryea extensions; the short I-7 carbody will likely minimize any operational problems on switches and curves. On my model, I glued the top of the coupler pocket securely to the floor (not wanting a screw to poke through the top of the platform); I used Kadee #158 scale couplers, but their #5’s will also work.

Install bolsters centered at 16’4” spacing. I used some vintage Red Ball bolsters from the scrapbox; styrene pads about 1’2” thick will also do the job. The prototype would have a centersill, which I omitted.

On my RIP track was an out-of-production Athearn blue-box caboose, from which I was able to harvest a toolbox and a pair of power handbrake stanchions for the end platforms. The toolbox is easily scratchbuilt if needed; glue it on a .080” styrene pad centered lengthwise at one side of the center floor section.

For my model, the brake system detail is minimal; I was unable to find information regarding the placement of the AB brake system the car received mid-life, and I prefer to focus my modeling effort on those details which are visible in
normal viewing. Using brake components from the scrapbox, I placed the reservoir centered under the bay window on the side opposite the toolbox; a scrap of .020” x .100” (#125) styrene strip supports each end. The available prototype photo does not show the location of the cylinder and valve. Normally they would be placed opposite the reservoir in the space consumed by the toolbox – the cylinder near the centersill and the valve near the edge of the floor. Lacking space between the toolbox and the trucks, and not wanting to inhibit truck rotation, in the spirit of “don’t try this at home” I moved the valve to an improbable prototype location near the center of the car.

In its mid-life rebuilding, the I-7 got its original arch bar trucks upgraded to AAR (“Bettendorf”) trucks with leaf springs. I replaced the coil springs in a pair of Kadee #500 trucks with out-of-production leaf springs formerly offered by Walthers. Kadee offers a direct solution with their leaf-spring AAR caboose truck (#580).

**Detail the Carbody**

At each end of the endsill is a triangular gusset; cut from .010” x .156” styrene strip (#107) and glue in place. Also on the endsill on either side of the coupler box is an 18” drop grab (Westerfield #1197); drill for them now, but install after painting.

Tichy ladders (#3033) have about the right rung spacing, and look better if installed inside-out. Drill (#57) into the top of the endsill for the stiles, insert the ladder, and trim the tops of the stiles at a slight angle to match the inner contour of the roof. Glue a “stop” of .020” x .020” styrene to the underside of the roof to correctly position the tops of the stiles. Install the ladder after painting.

Cut twelve .010” x .020” x 1’8” styrene strip (#100) running board supports and glue them at each roof seam and at each end of the roof. Tip – glue the two end supports first, then use a straightedge to align the ends of the remaining supports.

The wooden running board is Tichy #3029. Cut it to 32’3” by removing material from each end; make your cuts so that the rivets on the running board will line up with the running board supports. Glue the running board centered on the roof. The lateral walks are supported under each end by hidden .020” x .040” styrene strip (#122) spacers. A pair of cosmetic straps of .010” x .030” styrene strip (#101) are glued to the bottom of the lateral walks under each edge, then bent down across the roof eaves and glued.

The caboose end railing stanchions are brass hood-unit handrail stanchions by Smokey Valley (#P108) that I happened to have on hand. They appear to be out of production, but similar stanchions of other brands are currently available; look for a height from floor to handrail of about 3’0”. Using the photos and plan as a guide, drill into the top of the endsill and glue them in place. A stanchion is also used for the backup valve pipe just right of center on the endsill; glue it to the outside of the endsill. A short L-shaped length of wire installed in the stanchion hole will simulate the valve.

The end railing of .015” wire (DA #2505) runs from the right ladder stile, through the stanchions, then bends downward then inward at the bottom to form a long grab for the steps. Bend the wire and test fit it in the stanchions and a hole drilled into the end of the endsill; install the railing after painting.

The step grab at the left side is C-shaped about 3’6” long, running from just above the third rung of the ladder to the end of the endsill. Glue a 1’4” piece of .015” x .030” styrene strip (#111) to the back of the left ladder stile just above the third run to thicken the stile to accommodate a hole for the grab. Drill for the grab, test fit it, and install after painting.

---

End view, completed unpainted model.
The platform brake stand has two struts, and leans outward from the endsill. I harvested mine from an old Athearn blue-box ATSF caboose carbody (still available and cheap at flea market tables). An alternative is Bowser/Selley No. 675-00320. Glue a Kadee Ajax brake wheel to the brake stand, and glue the brake stand to the top of the endsill to the right of the left hand stanchion.

The uncoupling lever is bent from .015” wire, and hung from Detail Associates eyebolts (#2206) installed near the top of the endsill centered above the coupler box and at the left end of the endsill.

Using the photos and plan as a guide, drill for the roof grabs in the ends of the roof, and into the tops of the lateral walks. Bend the roof grabs from .015” wire.

I was unable to find any suitable B&O-style caboose steps in the aftermarket, but found that scratchbuilding them was fast and simple. The step assembly is rectangular, with overall dimensions 2’7” wide and 2’5” high. Cut a backing piece 2’5” high x 2’4” wide from .020” styrene sheet (#9020). Cut side pieces from .015” x .100” x 2’5” styrene strip x .100” x 2’5” x .100” x 2’5” x .100” x 2’5” styrene strip (#115); cut a taper into them ending about halfway across their top. Glue them to the sides of the backing piece. Cut a bottom step from .015” x .125” x 2’7” styrene strip (#116), and glue it to the bottom of the backing piece and side pieces. Cut a center step from .015” x .080” x 2’4” styrene strip (#114), and glue it centered on the backing piece between the side pieces. Glue the completed steps at each end of the sidesill, flush with the top of the end platform. Cut angle braces from .015” x .040” x 2’0” styrene strip (#112), and glue them behind the outer end of the step and to the bottom of the platform floor.

On the prototype, the sidesill is flush with the bottom of the carbody; add a .020” x .040” x 25’4” sidesill filler to the side of the underframe between the steps. Note that this piece was not installed when the unpainted model photos were taken.

On some B&O cabooses, a chain runs from the end railing to the uncoupling lever lift bar, handy for uncoupling a helper. If you desire to add this detail, cut a pair of lengths of chain such as A-Line #29219 for later installation. This feature was largely absent from the B&O cabooses assigned to my Cincinnati area layout location, so I omitted it.

The carbody and related parts are now ready for painting.

Painting and Lettering
Wash the carbody, floor, and trucks in a non-oily dish detergent such as Ivory Liquid. Paint the carbody a bright red (I used Floquil Caboose Red). Paint the grabs, end railings, and marker lamps yellow (I used Floquil Reefer Yellow). Paint the underbody floor, trucks, couplers, and smokejack Grimo Black, then overspray with a rust mix for a bit of weathering (the Varney smokejack is close to the prototype’s but I replaced it due to damage).
One of the totally cool features of B&O caboose decoration is the olive green window sashes and doors. On some models these are separate castings, resulting in a crisp color separation between the sash or door and the red carbody. On the Varney model, these are cast into the carbody; without a very steady hand in painting, the color separation will be ragged and poorly located.

Rather than brush painting, I like to use decal scraps sprayed with a very thin coat of a lightened Pullman Green for the side window sashes. I then cut the painted decal into narrow strips, and use them as edging along the sashes and doors where they meet the red carbody. After adding the decals, touch up the inner edges or the sash and the center portion of the door with a brush.

My attempts at modeling window sashes for the end windows were futile, complicated by the heavy cylindrical posts molded inside the Varney carbody. Maybe I’ll come back later with some better ideas, but for now, these windows remain sashless. If using a flat finish paint, spray the carbody sides and ends with a gloss finish for a smooth surface for decaling.

For lettering I used out-of-production Champion #HC-124 B&O caboose decals from my decal stash, with a 28” herald from a Champ hopper set. At this writing, Microscale offers a B&O caboose set with many lettering options. Mt. Vernon Shops offers an I-12 bay window set in yellow and white, but the website image of the set shows no car numbers for the white variation.

I elected to go with the 1948-55 era lettering for my I-7. As I was unable to turn up a prototype photo of the I-7 in this era, I used my best guess in lettering positioning with help from prototype photos of similar bay window cabooses such as the I-12.

The Varney side windows are positioned about 3” higher than the prototype I-7’s, resulting in a “squeeze job” for the road name above the bay window. There is only one correct choice for the car number --2500. My decal set did not include the grouping of small data covering build date and class number which appears on the lower left corner of the side, so I omitted it (maybe someday the data will come along for later installation). Since the repack data in the Champ set is a bit oversized, I harvested the repack data at the lower right from a B&O freight car set. The end numbers were placed above the right hand end window.

**Final Assembly**

It’s now time to install all those “assemble after painting” items. Start by adding your favorite window glass. (Next time you see Bruce Elliott, ask him how he deals with car painting vs. caboose window glass on his sealed carbodies. JT)

There are many grabs pre-painted yellow to install. Begin by gluing the L-shaped end grabs and slanted end grabs into the pre-drilled holes in the carbody end. Next, install the ladders into the pre-drilled holes atop the endsills, pushing them into the holes so that the tops of the ladders just rest against the stop glued to the underside of the roof; glue the ladders top and bottom, making sure that they are perfectly vertical.

Thread the pre-bent wire railing through the holes in the stanchions and glue the low end into a hole at the edge of the platform step. Glue a vertical C-shaped left-side grab into the hole behind the ladder stile, and a hole at the edge of the platform step. Glue the curved side grabs into their pre-drilled holes. Install the ladder roof grabs into their pre-drilled holes. Install the smokejack. Glue lenses into the markers – red facing the rear, and green facing the side and forward; glue the markers into their pre-drilled holes.
My model weighs two ounces, about one ounce below the NMRA recommendation. Since the I-7 will always be the final car in my consist, I left the weight as-is. If you prefer to weight to the standard, add it now. Screw the floor to the carbody. Add the couplers and trucks, and complete any last-minute paint touchup.

Bringing up the markers of your B&O freight, the I-7 faithfully represents the stubby, short-wheelbased appearance of the B&O prototype. Lipstick and all, this old Varney pig looks pretty good. And you only need one.

References


Parts List

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varney or Model Rectifier Corp.</td>
<td></td>
<td>Bay Window Caboose</td>
</tr>
<tr>
<td>Detail Associates</td>
<td>2206</td>
<td>Eyebolts</td>
</tr>
<tr>
<td></td>
<td>2505</td>
<td>Wire, .015”</td>
</tr>
<tr>
<td></td>
<td>6503</td>
<td>Caboose Side Grabs</td>
</tr>
<tr>
<td></td>
<td>6504</td>
<td>Caboose End Grabs</td>
</tr>
<tr>
<td></td>
<td>6505</td>
<td>Grabs, 36”</td>
</tr>
<tr>
<td>Evergreen</td>
<td>100</td>
<td>Styrene Strip, .010” x .020”</td>
</tr>
<tr>
<td></td>
<td>101</td>
<td>Styrene Strip, .010” x .030”</td>
</tr>
<tr>
<td></td>
<td>107</td>
<td>Styrene Strip, .010” x .156”</td>
</tr>
<tr>
<td></td>
<td>111</td>
<td>Styrene Strip, .015” x .030”</td>
</tr>
<tr>
<td></td>
<td>112</td>
<td>Styrene Strip, .015” x .040”</td>
</tr>
<tr>
<td></td>
<td>114</td>
<td>Styrene Strip, .015” x .080”</td>
</tr>
<tr>
<td></td>
<td>115</td>
<td>Styrene Strip, .015” x .100”</td>
</tr>
<tr>
<td></td>
<td>116</td>
<td>Styrene Strip, .015” x .125”</td>
</tr>
<tr>
<td></td>
<td>121</td>
<td>Styrene Strip, .020” x .020”</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Part No.</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Evergreen</td>
<td>122</td>
<td>Styrene Strip, .020&quot; x .040&quot;</td>
</tr>
<tr>
<td></td>
<td>125</td>
<td>Styrene Strip, .020&quot; x .100&quot;</td>
</tr>
<tr>
<td></td>
<td>142</td>
<td>Styrene Strip, .040&quot; x .040&quot;</td>
</tr>
<tr>
<td></td>
<td>146</td>
<td>Styrene Strip, .040&quot; x .125&quot;</td>
</tr>
<tr>
<td></td>
<td>219</td>
<td>Styrene Rod, .025&quot;</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>Styrene Sheet, Scribed</td>
</tr>
<tr>
<td></td>
<td>9020</td>
<td>Styrene Sheet, .020&quot;</td>
</tr>
<tr>
<td></td>
<td>9040</td>
<td>Styrene Sheet, .040&quot;</td>
</tr>
<tr>
<td>Kadee</td>
<td>580</td>
<td>Caboose Trucks</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>Brakewheel</td>
</tr>
<tr>
<td>Precision Scale</td>
<td>31334</td>
<td>Marker Lamps</td>
</tr>
<tr>
<td>Tichy</td>
<td>3029</td>
<td>Running board</td>
</tr>
<tr>
<td></td>
<td>3033</td>
<td>Ladders</td>
</tr>
<tr>
<td>Westerfield</td>
<td>1197</td>
<td>Drop Grabs, 18&quot;</td>
</tr>
<tr>
<td>See Text</td>
<td></td>
<td>Toolbox</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Handbrake Stand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AB Brake System</td>
</tr>
<tr>
<td></td>
<td></td>
<td>End Railing Stanchions</td>
</tr>
</tbody>
</table>

Elevated view of completed model; a light mist of black paint represents steam-era soot.
I-7 SECOND SECTION COMMENTARY
BY JOHN TEICHMOELLER

Great prototype information: For the most recent information on the history and evolution of the I-7, the third reference above, Dwight Jones’ Encyclopedia of B&O Cabooses, Vol. 3, is highly recommended. Chapter 2 (pages 17-33) contains 24 images of No. 2500 taken over the years to give you how and when (at least within a ballpark time range) physical features changed –such details as the change from arch bar to cast steel trucks, removal of tool box (a 1959 photo shows it gone although removal was authorized as far back as 1931, and a 1949 photo shows it still present).

Overland brass model: In 1986 Overland issued an HO I-7 in brass, OMI No. 1106, fabricated by M.S. Models of Korea. One wonders who the product consultant was on this project, if any, as while the model itself appears correct, the caption in Overland’s ad in the June 1986 Mainline Modeler seems somewhat befuddled on the class and designating a build date of 1939. The brass model shows the car in almost as-built state, with its original archbar trucks, tool box, smoke jack with “baffles” at the end of the “t” but with vertical handbrake stands that replaced the original horizontal brakewheel “stemwinders.”

We include the image from the Overland ad, two photos of the painted Overland model from John Schletzer’s collection and a larger view of Bruce Elliott’s version of the Varney upgrade. On some of the models the inboard end ladder portion that extends above the roof appears to be bent in an odd diagonal position, but prototype photos show this to be correct and not a result of clumsy operators on the layout. For what it’s worth, the brass model with its arch bar trucks and 1’ 9” shorter length seems more antiquated looking compared with the Varney kitbash. Will someone step up and show us an ingenious way to remove that excess length and resurrect that primitive look?
DAVID GROVER: THE PASSING OF A LOCOMOTIVE BUILDER

BY BRUCE ELLIOTT

Long time B&ORRHS member and modeler David Grover succumbed to cancer in November of 2018. I met David at the Fall Timonium show in 2003. At that time, he was displaying a highly detailed model of a Q-4b. I was intrigued by the detail until I found out the price: $1,000. I just couldn't see paying that much money and neither could a lot of other people. We did however keep in touch over the years, and I did buy a lot of the resin detail parts for Q class locomotives that David cast. His business went by the name: Eddystone Locomotive Company. I surmise that this came from his proximity to the Baldwin Locomotive works in Philadelphia where he lived at the time, before later moving to very, very rural Maine. David and I were to meet only one more time, also at Timonium, but we maintained contact through the ensuing years. David was an enthusiast of B&O steam and that was his great love of modeling.

On his web site were models that he had built for customers from almost every railroad in the Mid - Atlantic and New England area of the country. He would not only take your locomotive and enhance it, but he would also literally custom build most anything you wanted.

In truth, I came to know David better after his passing. It became apparent that he had a "thing" for camel back locomotives. In packing up his estate, I don't think it would be too conservative to say he had patterns and molds for over a dozen and a half "camels" from several railroads, none of which had ever been available before. There was an unbelievable amount of detail parts that he had for them as well. Patterns were in the hundreds, molds were in the thousands and castings and parts were like grains of sand on the beach.

David was a lot "old school", as he had a many research notes that were hand written and accompanied with hand drawings. In helping his widow with the estate, it was terribly distressing that even though a lot of things were marked, there were even more that weren't. Project pieces were scattered over two shops. I was only able to devote a week to try to catalog everything when I could have used a month to do as completely as there was just that much material.

David had worked commercially on several B&O projects including the Q-4 and S-1, creating a vast array of detail parts that far exceeded those on the best brass models from the finest manufacturers. At the end, he was working on detail castings for the Mantua/Tyco B&O P-7c and P-7e: cab, front pilot, boiler back head etc., as well as a tender for B&O Q-3's that were in step with a 40's/50's version of the locomotive to accommodate the head end brakeman's cab extension. He took pride in creating B&O locomotives that were only in photos such as an A-3, B-14, B-17, E-32a, S, Ta, etc. He also liked the challenge of a locomotive from the 19th century, and everything that could be found in a photo was on the model. Cab detail was phenomenal...
as well. There were dozens of back heads as individual as the locomotive that they were built for. A locomotive from David was a rolling piece of art and ran as smooth as silk. David had repowered and painted three of my PFM locomotives recently, and I was grateful to have such fine running locomotives. With the passing of time, model locomotive builders have become like fine wine, hard to find. David's work, like others in his category is well worth the investment. These models weren't just another choo-choo, but a rolling work of art. On the bright side, the business has been sold and in good time the new owner might perhaps be releasing many of the B&O detail parts for sale. David filled a need in a market for those who wanted something different.

Editorial Note
I, too, met David at Timonium, and like Bruce, found the Q-4b too expensive for me—and this was without sound or DCC. David was sort of a “stealth character” to me since he only contributed one article to The Modeler (a review of the Bachmann USRA 2-8-2) and since I don’t model steam, I didn’t keep in touch with David. However, he initiated an e-mail exchange as a result of Ed Kirstatter’s article in Modeler No. 46 on how Ed detailed his non-operational E-39. The gist of this exchange was basically David claiming “Well, I know how to get those Aristo Craft Dai Ichi locomotives running right.” He sent me a series of e-mails describing and illustrating one such project. There is enough content there that I think I can make an interesting article out of these exchanges for a future Modeler. In the meantime, enjoy the photo of David’s upgraded Dai Ichi “Royal Blue,” currently in the possession of the purchaser of David’s hobby estate.

John Teichmoeller
October 2019
In June of 2019 I bought two Tangent Models B&O O-59 gondolas, and they look fantastic. They are a follow-on of the O-59 that Tangent did a few years ago. They are a very nice compromise for a layout model as opposed to an RPM model with full underbody detail. At $38.95 retail they have a lot of great features and B&O specific details. The coupler pockets are extended from the ends to replicate a Duryea underframe, and it is roughly represented under the car. Of course, the underbody details are hidden from the side view, so the rough representation is a good compromise as it allows space for adequate weight—and there are two weights. This was an intentional compromise by the manufacturer to insure the floor height was accurate to the prototype. Weight is always a problem for empty gons and flat cars, and in this case I prefer their approach to making it look correct from the top and side, rather underneath. The carbody has separate grab irons, great hand brake detail, coupler lift bars, and a Tatum slack adjuster. I wondered if they would sell those Tatum slack adjuster castings for detailing other B&O freight cars. I checked and did receive a kind reply; unfortunately the parts sprue is out of stock. Follow my blog for an update when it is in stock. Tangent offers most of their parts sprues for only $3. It does appear the underbody details aren’t aligned with the slack adjuster, as the underbody detail is at the other end of the car but on the same side.
You will hear grumblings about the prices of these “state of the art” freight cars. But I recently saw on a chat group someone stated that an old Athearn Blue Box kit would be around $25 today, when adjusted for inflation. And no wire grabs, plastic wheels and with horn-hook couplers. It gives some perspective on what a deal I believe these cars represent.

Getting them ready for my 1950 era layout starts with some basic steps. The first thing I do with every car is paint and install metal wheels. These models have great wheelsets included so a quick trip to the paint booth, a spray with Vallejo NATO Black, and they are ready for service. You can see in the photo how shiny they are compared to the paint mask that has been sprayed many times. Usually I just spray the wheels without any pre-treatment but this time I got an unsatisfactory finish on several wheels that appeared to be the result of some type of oil on the wheel face. This hasn’t happened to me before with other wheelsets. I would recommend washing them with a solvent or degreaser. Lesson learned. The trucks get a quick weathering paint job with a mix of Vallejo NATO Black and Hull Red.

While I had the trucks removed, I was hoping to burnish the coupler box interiors and add some Kadee 231 “Greas-Em” Dry Graphite Lubricant. The end detail makes it difficult to remove the couplers, so I will shoot some lubricant into the coupler boxes and exercise the coupler shafts to make it as smooth as possible. The cars are already equipped with scale couplers, a bonus. I will lightly brush paint them with some rust paint. Late note, I was using one of the gons on the layout to test track placement, and a derailment caused a coupler box to come loose. They are actually glued in place and the screw only holds the cover to the box, not the car. I was a little disappointed with the two small spots of glue that secure the coupler box without a mechanical attachment, like a screw. I will use some styrene cement to reattach the coupler box using the original two pin connections and supplement it with some epoxy in other locations under the box to add some durability. I hope the flexibility of an epoxy held joint will help improve longevity as the styrene pin joint is small and rigid.

Wheel mask Bruce uses to spray paint his wheels without getting paint on the treads. Such masks are available from MicroMark.

The glued-on coupler pocket has come loose.

Lightly weathered car.
One of the preinstalled air hoses took a beating in the derailment, so before painting with some rust and light grey on the “metal” parts, I installed some Hi-Tech HO Scale AAR Air Hoses 22”, part #6038. After drilling a #76 hole in the end sill I used canopy glue to secure the hose from behind to the sill. It took some careful trimming to remove the valve from the diagonal support that came with the kit. I secured the support to the body with styrene cement and CA. The joint with the rubber hose was secured with canopy glue. I use Formula 560 Canopy Glue from Zap as recommended by others. Its durability will depend on me limiting derailments.

Final touches include creating some stencil updates to the reweigh and repack information with black decal patches and 1950 dates and B&O locations. I added a few chalk marks from Speedwitch Media’s Decal 135 – Freight Car Chalk Marks. I want these to appear less weathered as if they were written within the last year.

Finally I overspray with Testors Dullcote and add some scrap dunnage and other things found in gondolas constantly in service.
In addition to the B&O cars, I purchased a Lehigh Valley gondola with similar features. The LV car was treated similarly to the others, and I got to weather the wood decking using time honored techniques of gray, tan, and black washes. This car does not have a Duryea underframe. For the body, the lighter red color allowed me to use some Tamiya 87131 Panel Line Accent Color – Black to weather the seams, structural members, and to highlight the details. I enjoyed using the accent color using the pin wash technique and will write further about it in a future blog.

A couple of night's worth of work and these cars are ready for service. Nice models at a fair price.

Follow B&O Modeling on WordPress.com

View all posts by bomodeling
A (B&O) DAY AT CINCINNATI UNION TERMINAL

BY BOB CHAPMAN

[Editor’s Note: Cincinnati Union Terminal received a $228 million rehab, the most recent and most extensive of numerous prior restoration/rehab efforts. It is now open as a “campus of museums.”]

As a young railfan growing up in Cincinnati, one of my favorite places was Cincinnati Union Terminal. Its architecture was unique, and it was regarded as one of the world’s outstanding examples of the Art Deco style.

Approaching from a long boulevard, CUT’s majestic “world’s largest half-dome” would command one’s full attention. As one drew closer, details would emerge – the large clock with hands neon-lighted at night, the carefully terraced waterfall between the split driveways circling in front, and the two curved arms extending from the central structure, as if welcoming arriving travelers in an embrace.

Upon entering, one would find himself immediately in the rotunda under that half-dome. Straight ahead in the floor’s center was a circular information booth with its lighted digital clocks, a rarity in those days. But the show was above, with a lengthy mosaic mural on either side, one depicting the history of transportation and the other the history of Cincinnati. Best of all was the ceiling, with its wonderful yellow and orange Art Deco hues curving around the dome’s contours in concentric half-circles.

Past the rotunda was the concourse spanning CUT’s sixteen platform tracks. Along each side were train gates designated by track number, spaced by more mosaic murals highlighting Cincinnati’s industries ranging from soapmaking (Procter & Gamble) to piano manufacturer (Baldwin). A quick check of the arrivals and departures boards would show which trains were in the station; the choice of a ramp or stairs would lead one to trackside.
CUT was completed in 1933, with financing shared equally by its seven owning railroads – B&O, C&O, L&N, NYC, N&W, PRR, and SR. The project was designed as the ultimate railroad passenger solution for the city, combining five separate railroad-owned facilities into one union station, and destroying a sizeable local hill to raise all of CUT’s trackage by 16 feet to place it above the Ohio River’s flood stage. Trackwork and an integrated new set of support facilities for engine and train servicing were meticulously designed to provide a capacity for 216 arrivals and departures per day – a number approached during the years of World War II.

**CUT in 1954**

As modelers, many of us like to model memories, and in my case it should be no surprise that I selected Cincinnati in 1954 as my choice. Not to play favorites, I elected to model Cincinnati as a location, with all seven of its “fallen flags” represented. Cincinnati Union Terminal would be the layout’s centerpiece, where the seven railroads converged and connected.

CUT was still a vibrant facility in 1954, with 82 passenger trains originating or terminating, and another six on the B&O passing through. Steam could still be found on the trains of all the roads except the Southern, which had just completed its dieselization. CUT’s diesel power was colorful, and often diverse. There were such oddballs as Pennsy’s passenger sharks as well as frequent callers from Fairbanks-Morse and Alco.

B&O took top honors with a total of 24 trains per day, closely followed by NYC with 20:

**CUT Arrivals/Departures Summary – 1954**

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Originating/Terminating Trains</th>
<th>Through Trains</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;O</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>C&amp;O</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>L&amp;N</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>NYC</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>N&amp;W</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>PRR</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>SR</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>82</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

This array of trains presented the fun challenge of accurately modeling each train’s consist with the correct arrangement of head-end cars, coaches, sleepers, diner, and lounge. In a few cases consists were purchased, but in many cases getting the exact cars needed required construction of “craftsman kits,” kitbashng, or scratchbuilding. With this approach I’ve been able to model most of Cincinnati’s premier passenger trains, and am well along on representatives of the secondary trains and locals. No – I’ll not be modeling all 88 trains!

The model CUT offers some fun operating possibilities. Connecting trains of different roads would swap sleepers, head-end cars would be switched to mail and express facilities, consists would need to be turned, and locomotives serviced. Our B&O-focused article here will point out some of these possibilities.

**The B&O in CUT – 1954**

B&O’s train board in 1954 carried an impressive 24 trains:

<table>
<thead>
<tr>
<th>Time</th>
<th>Ar/Lv</th>
<th>Train #</th>
<th>Name</th>
<th>To/From</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:55 a.m.</td>
<td>Ar</td>
<td>#57</td>
<td>(Local)</td>
<td>Detroit</td>
</tr>
<tr>
<td>7:15 a.m.</td>
<td>Ar</td>
<td>#1</td>
<td>National Limited</td>
<td>New York</td>
</tr>
<tr>
<td>7:30 a.m.</td>
<td>Lv</td>
<td>#1</td>
<td>National Limited</td>
<td>St. Louis</td>
</tr>
<tr>
<td>7:35 a.m.</td>
<td>Lv</td>
<td>#57</td>
<td>(Local)</td>
<td>Louisville</td>
</tr>
<tr>
<td>7:50 a.m.</td>
<td>Ar</td>
<td>#12</td>
<td>Metropolitan Special</td>
<td>St. Louis</td>
</tr>
<tr>
<td>8:50 a.m.</td>
<td>Lv</td>
<td>#12</td>
<td>Metropolitan Special</td>
<td>New York</td>
</tr>
<tr>
<td>9:55 a.m.</td>
<td>Ar</td>
<td>#3</td>
<td>Diplomat</td>
<td>New York</td>
</tr>
<tr>
<td>Time</td>
<td>Ar/Lv</td>
<td>Train #</td>
<td>Name</td>
<td>To/From</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>---------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>10:05 a.m.</td>
<td>Lv</td>
<td>#356</td>
<td>(Local)</td>
<td>Detroit</td>
</tr>
<tr>
<td>10:15 a.m.</td>
<td>Lv</td>
<td>#3</td>
<td>Diplomat</td>
<td>St. Louis</td>
</tr>
<tr>
<td>12:50 p.m.</td>
<td>Ar</td>
<td>#64</td>
<td>(Local)</td>
<td>Louisville</td>
</tr>
<tr>
<td>12:50 p.m.</td>
<td>Lv</td>
<td>#54</td>
<td>Cincinnati</td>
<td>Detroit</td>
</tr>
<tr>
<td>1:15 p.m.</td>
<td>Lv</td>
<td>#238</td>
<td>(Local)</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>4:50 p.m.</td>
<td>Ar</td>
<td>#53</td>
<td>Cincinnati</td>
<td>Detroit</td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Ar</td>
<td>#2</td>
<td>National Limited</td>
<td>St. Louis</td>
</tr>
<tr>
<td>5:55 p.m.</td>
<td>Ar</td>
<td>#233</td>
<td>(Local)</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>6:30 p.m.</td>
<td>Lv</td>
<td>#63/355</td>
<td>(Local)</td>
<td>Louisville</td>
</tr>
<tr>
<td>9:00 p.m.</td>
<td>Ar</td>
<td>#53</td>
<td>(Local)</td>
<td>Detroit</td>
</tr>
<tr>
<td>9:20 p.m.</td>
<td>Ar</td>
<td>#4</td>
<td>Diplomat</td>
<td>St. Louis</td>
</tr>
<tr>
<td>9:40 p.m.</td>
<td>Lv</td>
<td>#4</td>
<td>Diplomat</td>
<td>New York</td>
</tr>
<tr>
<td>10:25 p.m.</td>
<td>Ar</td>
<td>#11</td>
<td>Metropolitan Special</td>
<td>New York</td>
</tr>
<tr>
<td>11:05 p.m.</td>
<td>Ar</td>
<td>#58</td>
<td>(Local)</td>
<td>Louisville</td>
</tr>
<tr>
<td>11:45 p.m.</td>
<td>Lv</td>
<td>#58</td>
<td>(Local)</td>
<td>Detroit</td>
</tr>
<tr>
<td>11:59 p.m.</td>
<td>Lv</td>
<td>#11</td>
<td>Metropolitan Special</td>
<td>St. Louis</td>
</tr>
</tbody>
</table>

Part of the fun of modeling a union station such as CUT is discovering which trains were in the terminal at the same time. For example, NYC’s and Pennsy’s flagships, the *Ohio State Limited* and the *Cincinnati Limited*, both arrived from the north virtually side by side at 8:30 a.m. And there were handoffs, such as a sleeper exchanges between Pennsy’s *Cincinnati Limited* and L&N’s *Pan-American*, and NYC’s Chicago trains and C&O’s named fleet.

For the remainder of the article, we’ll show an hour by hour look at B&O’s passenger train activity, with representative locomotives and consists as they might have existed in 1954. As we do this, we’ll try to capture some of the shared-trackage fun of the other trains in the terminal at the same time as the B&O activity. We’ve done some heavy saving and loaded our camera with Kodachrome 10 – let’s go!

**MODELING CUT**

[Image: Scratchbuilt from original architect’s elevations, the model CUT serves as the centerpiece for the layout]
The front arch takes shape, scratchbuilt from styrene sheet and strips.

The neon-lit hands of CUT’s iconic 16-foot clock keep travelers on time; on the model, the time is always 10:10...

Above the model’s marquee are 1452 window panes, the same as the prototype. Sheer luck!

Even the platform’s umbrella roof supports were Art Deco; CUT’s 16 tracks were selectively compressed to the model’s eight due to space constraints. Sadly, that’s not the layout’s scenery.
6:55 a.m.

It’s 6:55 a.m., and CUT’s first trains of the day have arrived. On Track 2, it’s B&O local #57 just in from Detroit at 6:55, headed by dark blue President-class P-7c 4-6-2 #5308; compared with those of other roads, B&O’s steam locomotives were kept well-maintained and shiny until their end of service. On Track 3 is NYC’s Ohio Special (#309) from Detroit with class J-1d Hudson #3280 on the point, while Track 4 holds PRR’s St. Louisan connection (#203) from Columbus, led by a pair of steam-generator-equipped RS3’s. On Track 5 is L&N’s local #2 from Montgomery, just arrived northbound. The latter three trains have all just arrived at 6:45 a.m. to start CUT’s new day.

7:20 a.m.

Shorn of her chrome-plated nose decor and with a number plate slapped on her forehead, America’s first slant-nosed E-unit, EA #51, arrives from New York on Track 5 with B&O’s National Limited (#1); she’ll be in CUT a brief 15 minutes after her 7:15 arrival before continuing on to St. Louis. In on Track 3 at 7:05 is a N&W class J 4-8-4 leading the Pocahontas (#3), completing her overnight run from Norfolk. Track 4 contains NYC’s #438/410 Chicago local in at 7:15, while Track 6 carries PRR’s Southland (#200) arrival at 7:20, handled from Chicago by red Baldwin “passenger shark” #5778.
7:30 a.m.

A quick run to the north end of the platform rewards us with a photo of NYC’s first J-3a “Super Hudson,” #5405, leading the Chicago local; in the late steam era, NYC’s big steam migrated west to the Big Four, often running out their miles in humble assignments on secondary passenger trains and locals. Soon to depart on Track 5 is the National Limited with her iconic observation car, Capitol Escort, and on Track 6 a glimpse of Pennsy’s southbound Southland consist.

7:35 a.m.

B&O local #356 builds up steam for its 7:35 southbound departure for Louisville; today she is powered by class P-6a 4-6-2 #5244. B&O’s E-units were focused on its primary and secondary intercity trains; many locals, especially on B&O’s west end, continued into the mid-50s with steam power. As these locals were discontinued, their steam power often died with them.
8:45 a.m

Soon to ease out of the station at 8:45 on Track 3 is the Southern’s Cincinnati flagship, the Royal Palm, headed for Jacksonville and ultimately Miami via FEC. Much less glamorous and also departing at 8:45 on Track 4 is NYC’s #426, the Cleveland Special, headed by Niagara #6008; by 1954, the Niagaras were on borrowed time, running out their pre-scraping miles under both deferred mechanical and cosmetic maintenance. In contrast, B&O continued to take pride in both its steam and diesel power, evidenced by E6 #62 heading the Metropolitan Special on Track 2; the Met will soon depart at 8:50 for New York.

9:55 a.m

CUT’s morning rush is winding down with a final burst of activity at 9:55. On Track 3, B&O P-1d #5044 readies for its 10:05 departure with Detroit local #356. On track 4 is N&W’s Cavalier (#16/22) with its imminent 10:00 departure for Norfolk; on the point is class J 4-8-4 #611, of future excursion fame. On Track 5 is the rear of B&O’s Diplomat (#3) consist, completing its 15-minute stop for a 10:10 departure for St. Louis.
10:00 a.m.

A quick walk to the south end of CUT’s platforms gives us a good look at the head end of the Diplomat, powered by E8 #96 on Track 5; she’ll depart at 10:10. N&W’s Cavalier on Track 4 will pull out within the minute, and B&O’s Detroit local #356 on Track 3 will be close behind.

12:00 p.m.

With a mid-day lull at CUT, we’ll hop a trolley bus for the short ride to CUT’s locomotive servicing facility; with the diversity of motive power from six of CUT’s seven tenant roads (all but SR), visits here are always interesting and fun. Riding CUT’s turntable is B&O P-7e #5314. She has already had her ashpans cleaned, lubricants topped, boiler wiped, and inspection completed. After a stop at the coal dock and water plug to top off her fuel and water, she’ll be ready for her 1:15 departure with Cincinnati-Pittsburgh local #238.
1:00 p.m.

The Cincinnatian has left, and the P-5 from the Louisville local has headed north to CUT’s roundhouse for servicing. One of CUT’s unique 750 horsepower Lima-Hamilton switchers prepares to turn the Louisville local consist for its next run. Newly arrived for loading on Track 3 is B&O’s Pittsburgh local #238, headed by P-7e #5314, with a scheduled 1:15 departure. On Track 6 is #238’s direct Pittsburgh competitor, the Manhattan Limited. Hampered by twice as many stops, reduced-speed secondary trackage, and train consolidation switching in Wheeling, B&O’s train will make the Pittsburgh run 2 ½ hours slower than Pennsy’s; only B&O’s friendly service can keep #238 competitive.

1:00 p.m.

The mid-day hours at CUT are generally slow, with occasional departures of locals; this 12:50 grouping is clearly an exception. B&O’s Cincinnatian (#54) headed by P-7d #5304 readies for a 12:50 departure on Track 4, while just in on Track 5 is #64, a B&O local from Louisville headed by P-5 #5222. On Track 6, Pennsy’s Pittsburgh/New York bound Manhattan Limited awaits a 1:10 departure, headed by a K4s.
Epilogue
It’s lunchtime, and we’ve seen each of B&O’s Cincinnati trains once. We’ll sadly miss the return trip of these trains, but the Kodachrome is running out, and there will be other days and other times. It’s been a good day.

Appendix
Following is a list of B&O locomotives photographed for the article. Each of the prototype classes was known to have visited CUT during the period represented. The models were painted by the author.

<table>
<thead>
<tr>
<th>Road Number</th>
<th>Class</th>
<th>Type</th>
<th>Model Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>5044</td>
<td>P-1d</td>
<td>4-6-2</td>
<td>Overland Models</td>
</tr>
<tr>
<td>5222</td>
<td>P-5</td>
<td>4-6-2</td>
<td>Key Imports</td>
</tr>
<tr>
<td>5244</td>
<td>P-6a</td>
<td>4-6-2</td>
<td>Key w/Akane Tender</td>
</tr>
<tr>
<td>5304</td>
<td>P-7d</td>
<td>4-6-2</td>
<td>Key Imports (Repainted)</td>
</tr>
<tr>
<td>5308</td>
<td>P-7c</td>
<td>4-6-2</td>
<td>Key Imports</td>
</tr>
<tr>
<td>5314</td>
<td>P-7e</td>
<td>4-6-2</td>
<td>Key Imports</td>
</tr>
<tr>
<td>51</td>
<td>EA</td>
<td>A1A-A1A</td>
<td>Overland Models</td>
</tr>
<tr>
<td>62</td>
<td>E6</td>
<td>A1A-A1A</td>
<td>Oriental Limited</td>
</tr>
<tr>
<td>96</td>
<td>E8</td>
<td>A1A-A1A</td>
<td>Oriental Limited</td>
</tr>
</tbody>
</table>

1:35 p.m. – Oakley
A quick ten-mile drive gives us one last look at #5314 at 1:35 p.m. on the point of Pittsburgh-bound local #238, pulling into Oakley station for one last suburban passenger pickup. She’ll make many more stops before arriving in Pittsburgh.
Most modelers know that the Pennsy built thousands of their X29 design steel boxcars, and with few exceptions, like the late cars with Dreadnaught ends, they are identical. Personally, I find building two or more identical models to be boring. With the X29 different doors and styles and locations for the doorstops can create some variety. For even more variety, however, one can look to the Baltimore & Ohio’s M-26 class of cars. This class offers six different versions that were also built in the thousands although not in the numbers of the X29. Granted the differences among the versions are not dramatic, but still I can count five different door types, different horizontal and vertical brake arrangements, Durylea and two other underframe arrangements, and different truck types. Steel boxcars representing the X29 and M-26 have been available in various forms in HO over the years, and many modelers are happy to accept them straight from the manufacturer. There have also been “upgrade” articles for the base line cars—you can search the enthusiast literature databases for these. In the meantime, if you would like to have a “little extra” rolling on your rails, I offer the following summary notes of how I accomplished this. All these details create enough variety to keep my attention. [Even if you don’t want to “improve” your M-26, Bill’s materials and techniques offer some great modeling insights. JT]

Door Details
The model I am illustrating here will be B&O #274971 built in October 1929. I utilized the Red Caboose RC-7003 (molds now owned by InterMountain). Photo #1 captures the right side of the car while Photo#2 is a close-up of the various door area details that distinguish this particular car. Tichy’s “Boxcar Door Hardware” set #3070 provides the “claws” used as door guides/supports—two sets are needed. In this arrangement the doors had a small rib along the bottom of the door, and I used .010 x .020 styrene to create this. Archer rivets will be added later. Flattened .010-wire is used for the handles on the doors after the molded on pieces were carefully removed. Tichy .020 rivets are used for the attachment bolts. Note that the upper door track has been
carefully shortened. The doorstops are from the Red Caboose kit. Note that the molded-on paired bolt/rivet heads under the door have been peeled off and relocated to match the cross bearers for the Duryea underframe.

**Sill Steps and Bracket Grabs**

A-Line Type “A” sill step parts (Photo #3) were annealed in a flame. The two corners were squared up with a Xuron micro-bender (No. 575). If you don't anneal them (use a candle or BIC lighter), they will crack when you use the micro-bender. Strips of 0.005-styrene were used to make the mounting tabs. A fillet of CA fills in the gap between the metal step and the styrene. Once that is cured, liquid Testors is applied to help melt the styrene. The next day the excess was carved away and sanded to give the impression that the styrene and metal are one part. Harvested Athearn boxcar rivets finish the effect. [No, harvesting Athearn boxcar rivets is not insane, it works out easier than you might expect. Just don’t try it when you have respiratory agitation. JT] With the Kadee bracket grabs firmly in place a new single edge razor blade will be used to carefully remove the flash.

**Ladders**

At some point Red Caboose (Photo #4) cut the tooling for the B&O’s signature seven-rung side ladders/six-rung end ladders. The B&O used lengths of steel bar to attach their ladders, and I have glued this in place along with attaching bolts. I have also replaced the molded on rungs with Plastruct’s 0.010 styrene rod except for the very bottom rung of the side ladders. After the ladders are glued onto the model, this rung will be clipped off and a drop grab iron inserted into the holes already drilled into the ladder stiles.

**End Details**

The “B” end of this M-26D has some interesting details, I think. I scratch built the signature “Tatum” brake step with bits of dimensional styrene. I think the way the retainer’s pipe cuts sharply to the right on the end is interesting: To make this, I use .010-wire which a little oversize but much easier to handle. Flattened .010-wire is used to make the two pipe brackets (Photos #5, 6). The B&O used what I call Type 2 Bracket Grabs on the bottom of the ends. They are characterized by having the brackets rotated 90°. The parts seen in Photo #7 are the kit parts converted to brass (by Valley Brass). I did a lousy job with the drill template for the bracket grab. I am going to try to pry it off, fill the holes and re-drill for a straighter install. The brake gear will eventually have a Kadee Ajax wheel attached. Photo #8 shows the ladder installed on the “A” end and how it looks with the steel bars and bolts used to secure it. That bracket grab demonstrates I can get them straight sometimes.
Aargh, that Duryea Underframe
Speedwitch makes a lovely kit for the M-26 Duryea underframe, and Photos #9–12 show my interpretation of how to build it. I used the 0.010-styrene rod for the pipe from the AB valve to the brake cylinder here because it is so flexible, and it made the bends much easier. I run hot and cold regarding the train line and did not install it this model because I did not think it would be visible, so the pipe from the dirt collector simply terminates to nowhereville.
Another Tatum Feature

Photo #13 shows the scratch built “Tatum Patent” route card holders that will eventually be attached to the side of the car to the left of the doors. These were basically a steel frame into which the tack board would slide.

Thanks to a friend, I know that the running boards were for the M-26D class were 42-feet 10 1/2-inches long and I plan to build a wood running board system using my favored Mt. Albert strip wood for this model. The M-26D class rode on Andrews trucks.

Hopefully I will follow soon with my Wheeling Lake Erie and Nickel Plate builds.
COMING FUTURE ISSUES

Here’s a list of articles for which a) material is in hand or b) is backed by credible author promises, along with prospective publication issue. If you can help or have anything you feel might contribute to the strength of articles on these topics, please contact the editors.

I-5ba Caboose by Jeroen Gerritson/51
Moloco Insulated Boxcar Reviews by Mike Shylanski/51
Airslides Part II by Mike Shylanski—51-52
2019 Convention Models/51
Chicagoland B&O Models by Bob Chapman/51
Poage Water Column by Bruce Griffin/52-53
B&O Track Scale by Ed Bommer/52
Winchester Track Scale by Fran Giacoma/52
P-31c Flatcar Kitbash by Jim King/52-53
F-4bm Diner by Bob Chapman/52-53
The 1926 Freight Car Fleet—Hoppers by Eric Hansmann/53
M-23 Accurail Upgrade by Eric Hansmann/52