The Keystone Modeler

Pennsylvania Railroad Technical & Historical Society

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The Keystone Modeler
Pennsylvania Railroad Technical & Historical Society

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MEMBERSHIP INFORMATION
PRRT&HS, PO Box 54, Bryn Mawr, PA 19010-0054

PRRT&HS MONTHLY E-NEWS
Keystone-e-news-request@lists.keystone-pubs.org?Subject=subscribe

FRONT COVER, TOP
Bowser's new H30 in freight car color and circle keystone. (Greg Martin)

FRONT COVER, MIDDLE LEFT
Completed HO-scale open-top trailer kit for PRR TrucTrain service. (Photo and model by Curt LaRue)

FRONT COVER, MIDDLE RIGHT
Wood Vandalia cabin car in N-scale. (Photo and model by Claus Schlund)

FRONT COVER, BOTTOM
A portion of one of John Johnson's award-winning Northern Region layout photos. (John Johnson)

The Keystone Modeler

Manuscripts and photographs submitted for publication are welcome. Materials submitted are considered to be gratis and no reimbursement will be made to the author(s) or the photographer(s) or his/her representative(s). The Society reserves the right to reject, for any reason, any material submitted for publication.

Please contact the editor for information and guidelines for submission. Photo files 800x600 pixels or larger in JPG format are preferred. Statements and opinions made are those of the authors and do not necessarily represent those of the Society.

The Keystone Modeler on CD-ROM

Disc 1	August 2003 to July 2004	*TKM* Nos. 1 – 12
Disc 2	August 2004 to July 2005	*TKM* Nos. 13 – 24
Disc 3	August 2005 to July 2006	*TKM* Nos. 25 – 36
Disc 4	August 2006 to July 2007	*TKM* Nos. 37 – 48
Disc 5	August 2007 to July 2008	*TKM* Nos. 49 – 60
Disc 6	August 2008 to Autumn 2009	*TKM* Nos. 61 – 71
Disc 7	Winter 2010 to Autumn 2010	*TKM* Nos. 72 – 75
Disc 8	Spring 2011 to Winter 2012	*TKM* Nos. 76 – 79

Each disc is $15.00. There is also a disc containing all issues from 1 to 48 for $60. If you are a resident of Pennsylvania, please include PA sales tax. Send a check or money order in US dollars payable to PRRT&HS to:

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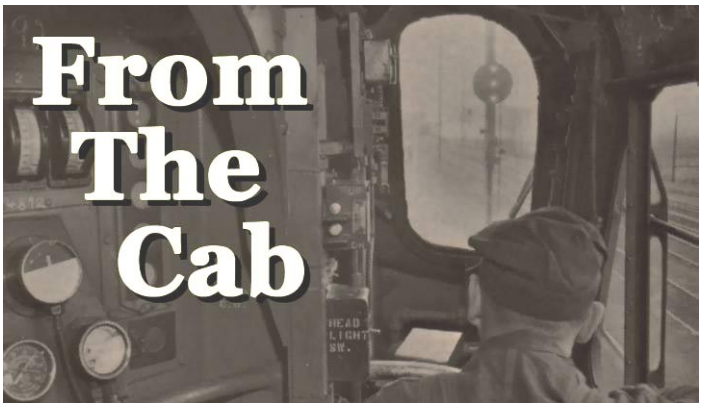


Three articles about Pennsylvania-themed layouts have appeared in the press in recent months. Bill Hughes' very impressive double-deck layout appeared in the October *Model Railroader*. Bill models the Pennsy in New Jersey, but his railroad was built in a specially-constructed building along the Gulf coast in Texas. In the November issue of *Model Railroader*, another layout of interest to Pennsy mavens appeared. Kevin Surman based his layout on the New York and Long Branch, and his operating sessions include both PRR and CNJ power.

An N scale Pennsy layout appeared in *Great Model Railroads 2014*. Dave Vollmer's layout is small and portable, because he is in the Air Force, but he has managed to incorporate some structures on his layout that are familiar to PRR modelers.

Every once in a while I receive another email from someone who wants to know why there aren't any layout articles in *TKM*. The answer is simple: no one is sending them to me! Some time ago, I wrote in these pages that I would welcome articles about Pennsy-themed layouts. I say it again – I'd be glad to have such an article.

What would such an article look like? You don't have to be a professional writer or photographer to produce it. Most of our contributors are not professionals. Surely, most of our readers know someone who has a PRR layout. Talk to that modeler. Visit his layout. Ask him how and why he built it. Take pictures. Write up what you found out. Send the photos (and maybe a sketch of the track plan) as attachments in a separate email from your write up. You could even write about your own layout if you are so inclined.

For our fall issue of *TKM*, we have the second part of Curt LaRue's PRR trailers, Claus Schlund's N scale cabin cars, Greg Martin's review of the Bowser H30, and some excellent photos from John Johnson's layout.

Jim Hunter, Editor

The Pennsylvania Railroad Technical & Historical Society

The purpose of the Pennsylvania Railroad Technical & Historical Society is to bring together persons interested in the history and modeling of the Pennsylvania Railroad, its subsidiaries and its acquired companies. Our goals are to promote the preservation and recording of all information regarding the organization, operation, facilities, and equipment of the PRR.

The Society's quarterly illustrated journal, *The Keystone*, has been published continuously since 1968. Each issue of 64 or more pages contains illustrated original authoritative articles about locomotives, cars, other equipment, facilities, and operating practices of the PRR. The Society also publishes its own thoroughly researched books and other materials concerning PRR history. *The Keystone Modeler* is also a quarterly special 30-plus page online publication of the Society.

The Society meets annually, usually during a weekend in early May, providing an opportunity for its members to get together and learn more about the PRR. Local chapters around the country also provide members and guests with regular meetings that feature PRR related programs.

Information about our Society may be found on our website – www.prrths.com. To join the Society, send $35.00 to:

PRRT&HS
PO Box 54
Bryn Mawr, PA 19010-0054

All memberships are for a calendar year, back issues of The Keystone for the current year are sent upon joining. Overseas membership has added postage fees.

PRRT&HS Interchange

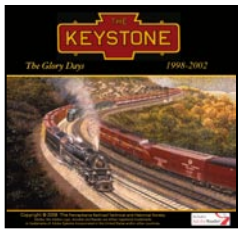
Selected Society Merchandise of Interest to Modelers

PRR Equipment Drawings on Microfilm

Copies of PRR equipment drawings are available from the Society's microfilm collection. To order drawings, you must know the drawing number and title. Ordering information and lists of arrangement drawings are available on the Society's website. Go to www.prrths.com, select National Society, and then The Interchange. If you require a printed copy of this information, please send your address and a check for $2.00 made out to PRRT&HS to:

Richard C. Price
779 Irvin Hill Road
McVeytown, PA 17051

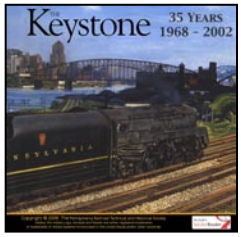
The Keystone CD 5



The Keystone CD No. 5, The Glory Days, covering 1998 to 2002, is now for sale at the price of $75 for members. New Jersey residents add $5.25 sales tax. Order CDs from:

Al Buchan
785 Cornwallis Drive
Mt. Laurel, NJ 08054-3209

The Keystone DVD 1



The Keystone DVD No. 1 covering 35 years of *The Keystone* from 1968 to 2002 is available. The navigation of this product is being upgraded as are some of the administrative notes and text. The improved edition will be ready for ordering soon. Those few who have already purchased the DVD will be able to trade it in for a new one when it's available. The price of this DVD is $375. ***This DVD requires a computer with a DVD drive. It is NOT a video disk that can be played on a DVD player for viewing on your TV.***

The Keystone Modeler
NEWSWIRE
With Steve Hoxie

PRR Product News

BOWSER MANUFACTURING
http://www.bowser-trains.com/
PRR H30 Covered Hopper – HO scale

(Steve Hoxie)

This long needed model has been available but may now be out of stock, especially in the Freight Car Color scheme. As is normal from **Bowser**, additional runs are planned.

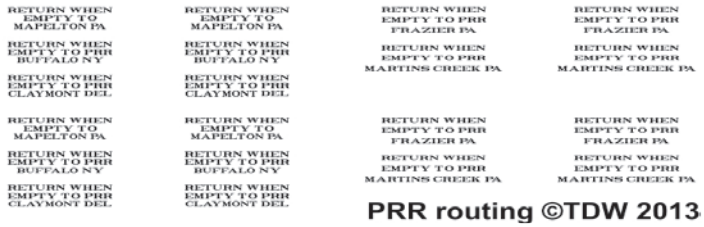
EASTERN SEABOARD MODELS
http://www.esmc.com/
PRR G32C Gondola – N Scale

(ESM Photo)

ESM is getting this kit available before the end of the year. It is in their **Made in America** line.

JERRY GLOW DECALS
http://home.comcast.net/~jerryglow/decals.html
PRR H30 Return When Empty Decals – HO Scale

Jerry Glow has available decals directing return routing of PRR covered hoppers. Available in black lettering for gray cars and white lettering for Freight Car Color cars. Contact Jerry at jerryglow@comcast.net .



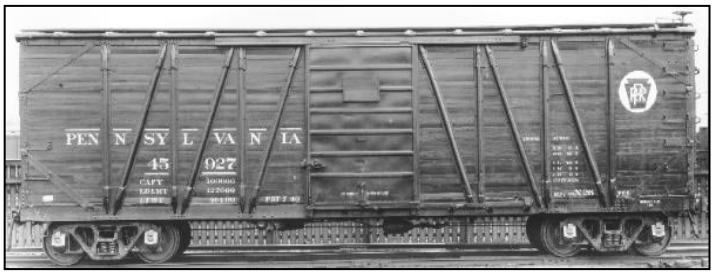
▲Sample return data on decals. ▼ "Return to Buffalo" applied on a Bowser H30. *(Steve Hoxie)*

MOUNT VERNON SHOPS
http://www.mountvernonshops.com/
PRR G30/G30A Decal Set – HO Scale

(PRR)

John Frantz has produced this set which will letter four cars in the circle keystone scheme. Kits for these cars are produced by Funaro & Camerlengo as well as Tichy. Modeling information on these cars can be found in *TKM* #15, October 2004.

PRR X26 Decal Set—HO Scale



(PRR)

John has also produced a decal set for the X26 boxcar in the Circle Keystone scheme. Sufficient numbers and data are pro-

vided to letter four cars. Models for these cars in several variations are available from Funaro & Camerlengo.

MTH Electric Trains
http://www.mththrains.com/
PRR 2-8-0 H10s—HO Scale

MTH is developing an H10s. Artwork has been available in their catalog, but no other information. At Milwaukee Trainfest on November 9 and 10, a preproduction model was on display. Although requested photos have not been forthcoming from **MTH**, a YouTube video showing the model can be found here.

http://www.youtube.com/watch?v=KTQ-5jc4T2Y

The H10s appears at 8:45; clicking on Pause affords a good look at the left side. Details on the model make it appear as a mixed H9s/H10s, but these probably can be corrected easily—to either H9s or H10s—by the modeler. The tender shown is very close to a class found with some H9s and H10s engines. This engine should be interesting to many of us. Delivery is scheduled for January 2014.

GHB International
http://www.ghbintl.com/
PRR L1s Steam Locomotive—N Scale

GHB has just announced a made in Korea brass model of the L1s. Both original and modernized versions are planned. The models will be factory painted and lettered with four engine numbers of each version. They will be DCC ready with provisions for sound. See your dealer to make a reservation. Availability is planned for mid-2014.

Upcoming Events

December 7 – 8 Marlborough, Massachusetts
New England Model Train EXPO
www.hubdiv.org/fallshow/index.htm

January 9-11, 2014 Cocoa Beach, Florida
Prototype Rails Railroad Prototype Modelers Meet
http://www.prototyperails.com/

January 25 – 26, 2014 West Springfield, Massachusetts
Amherst Railway Society Railroad Hobby Show
http://www.railroadhobbyshow.com/

March 27 – 29, 2014 Port Wentworth, Georgia
Savannah Prototype Modeler's Meet
http://www.savannahrpm.com/

March 28 – 30, 2014 Malvern, Pennsylvania
Railroad Prototype Modelers Valley Forge Meet
http://phillynmra.org/rpmmeet.html

Advance Planning

May 1-4, 2014 Camp Hill, Pennsylvania
PRRT&HS Annual Meeting
http://www.prrths.com/conventions/PRR_Annual.html

July 13-19, 2014 Cleveland, Ohio
NMRA National Convention and National Train Show
http://www.2014cleveland.org/

The Reading T1 4-8-4 by Broadway Limited Imports is currently in stock at many outlets. The PRR leased several of these engines from Reading in 1956 during a traffic upturn. Most ran on the Susquehanna Division alongside PRR M1b 4-8-2 engines. BLI's new models are equipped with smoke and sound. Tim Garner weathered his up to match the rough look of the T1 engines in PRR service. Most were retired as soon as PRR returned them, but three would go on to fame through excursion service and preservation.

Bowser Pennsylvania Railroad Class H30 Covered Hopper

HO Scale New Kit Review

by Greg Martin – Photos by the author unless noted

H30 #255570 built by PRR in June of 1946. PRR Negative #15720.

It has been said that the Pennsy Men were so impressed with the success of the rebuilt GLE class covered hopper that they sat down and designed and developed the H30 and H30A classes. So successful were the designs that some 1,575 cars were built before moving to the next class of covered hopper, the H33.

As built, these cars rode on PRR class 2E-F2a 70 ton Andrews style trucks. My photo evidence seems to indicate that the trucks were upgraded by about 1946. [Ed. Note: Andrews were outlawed after World War II. Some H30 received 2E-F11 "National," or 2E-F12 "Young," or 2E-F22 –"A.S.F. Ride Control" trucks.] The most significant differences between the H30 and the H30A included: cast vs. built up welded bolsters; integral running board that was actually part of the roof versus separate running board (of two types); welded vs. riveted panel roof; an overhanging lip on the H30A roof edge to eliminate leaking and the individual versus the continuous hopper guides of the H30A.

Restored H30 #255750 on display at the Railroad Museum of Pennsylvania in 2005. *(Tim Garner)*

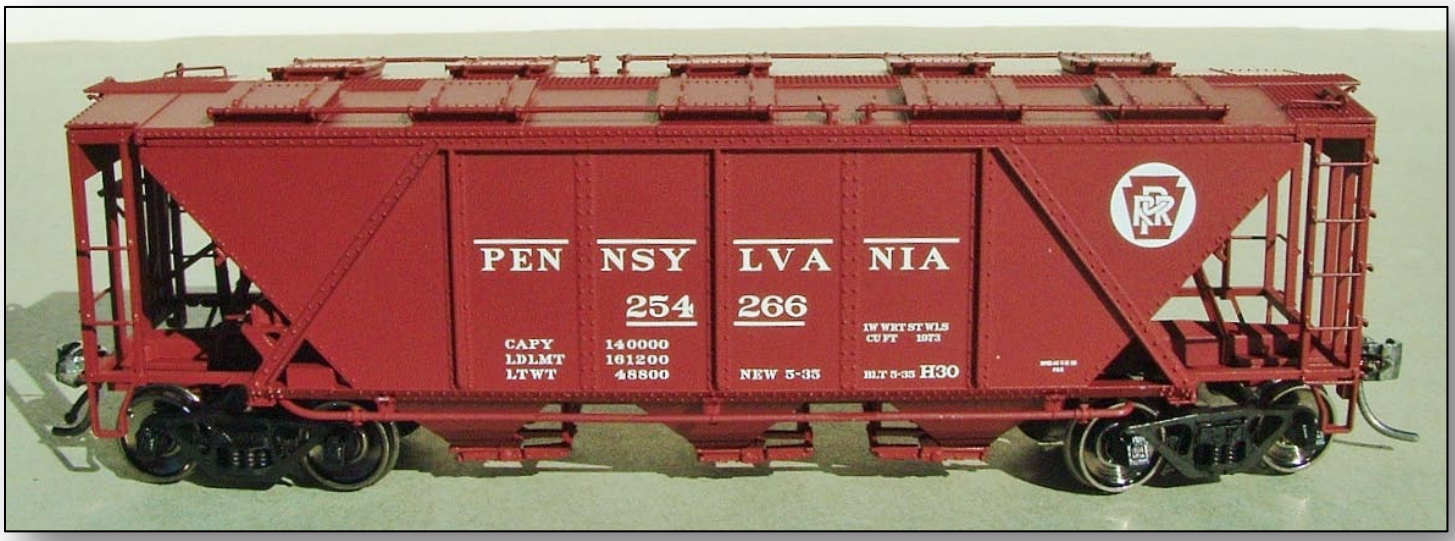
▲ H30A #255765 in the gray shadow keystone scheme was built in January of 1952. PRR negative #-20554. ▼ H30 #254928, built in March 1938, is in Hollidaysburg, Pa. in the gray simplified keystone scheme in September of 1977. *(R.J. Burg)*

Required reading and research includes the January 2004 issue of ***TKM*** as well as a set of articles in the February, March, and particularly the April 2001 *Mainline Modeler*. The April issue was written by our own Mike Bradley and was an all color photo essay of the PRR H30/30A filled with his photos taken from the early 1970's of cars in PRR paint and lettering to cars in Conrail paint and lettering. The *Mainline Modeler* articles focus heavily on the N&W, but they also include limited Pennsy photography and there are drawings of the car. The drawings helped with my review of the car and the accuracy of the model. The drawings in this case revealed that the major dimensions of the car matched the drawings. I found one exception in reviewing the details and that being the configuration of the bolster/end sheet support. There is a variation between the model, the drawing and my supporting photography. I refuse to say it is wrong as I don't have access to the drawings used to create the model and I lack the official PRR drawing from the archives. We'll just leave it at *it is different*. I certainly can live with it as it is in a non-discrete area near the centersill.

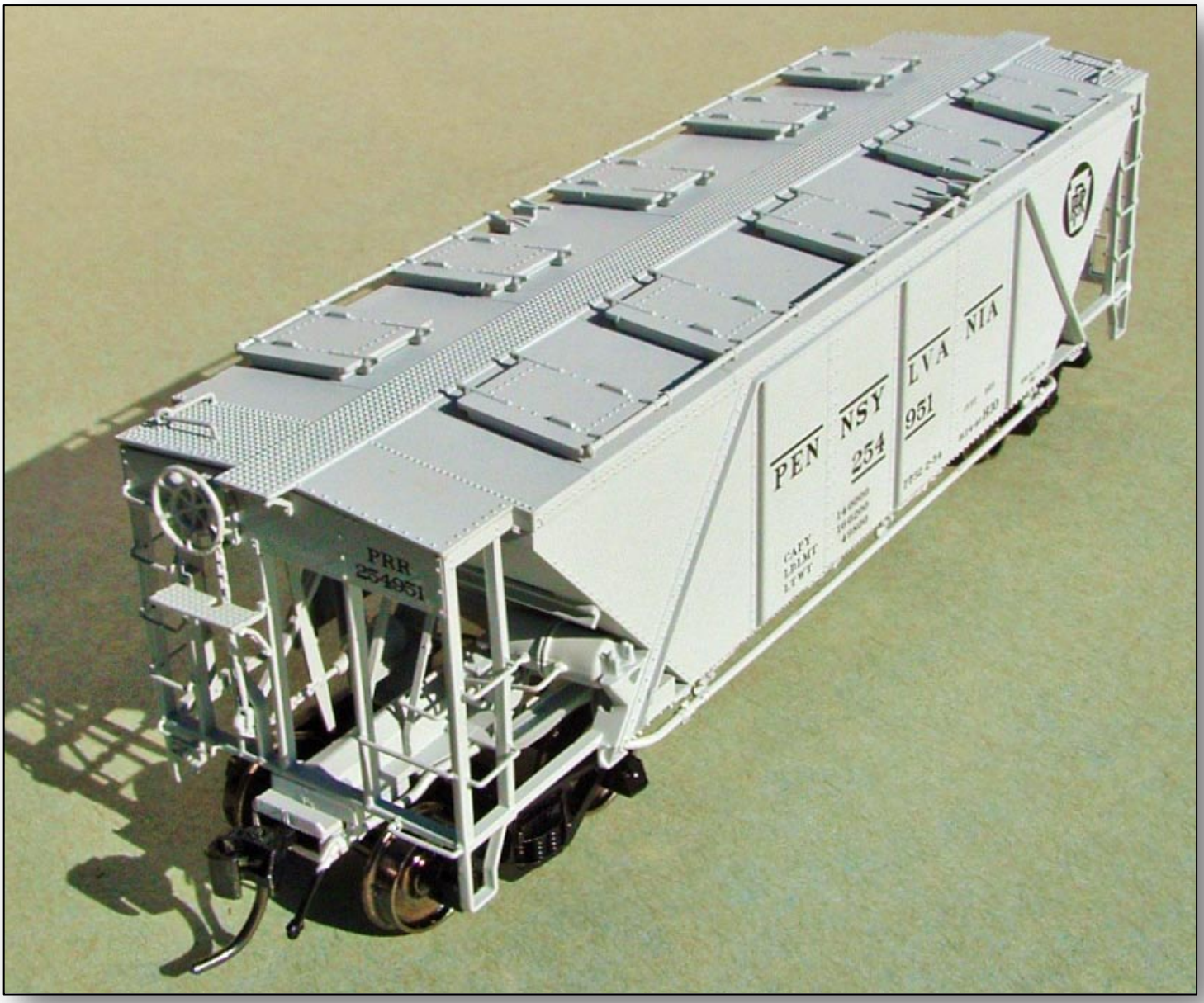
The models I used for the review were cars painted and lettered in the Ball/Circle Keystone and PRR Freight car color, the Ball/Circle Keystone and PRR gray, and the Shadow Keystone/Billboard lettering and PRR gray. The paint on all my samples was evenly applied and very opaque with no signs of build up or orange peel. The lettering was crisp, opaque and matched the drawings in the *Pennsylvania Railroad Compendium: Freight Car Lettering Arrangements* (George S. Kusner and Nicholas Seman, The Middle Division, ©1989), as well as my photo research. When it comes to these issues on a "built up" car I am very picky and you all know me as extremely picky on PRR colors as well. I am extremely satisfied with the PRR Gray color, albeit just lighter than the samples I submitted to the PRRT&HS Paint Committee. With a bit of highlighting and shading it should fit into the fleet quite nicely. The PRR Freight Car Color (FCC) is much better than any of the previous Bowser offerings, however, a work in progress and if Bowser works with our PRRT&HS Modeling Committee we may see some minor tweaking to this color.

Elevated ¾ view of the Bowser model in freight car color with the circle keystone, A-end.

Detail view of the B-end in freight car color.



Side view. Note the outboard brake line.



Elevated view of the gray circle keystone version's B-end. The roofwalks flush with the roof are accurately modeled for this class.

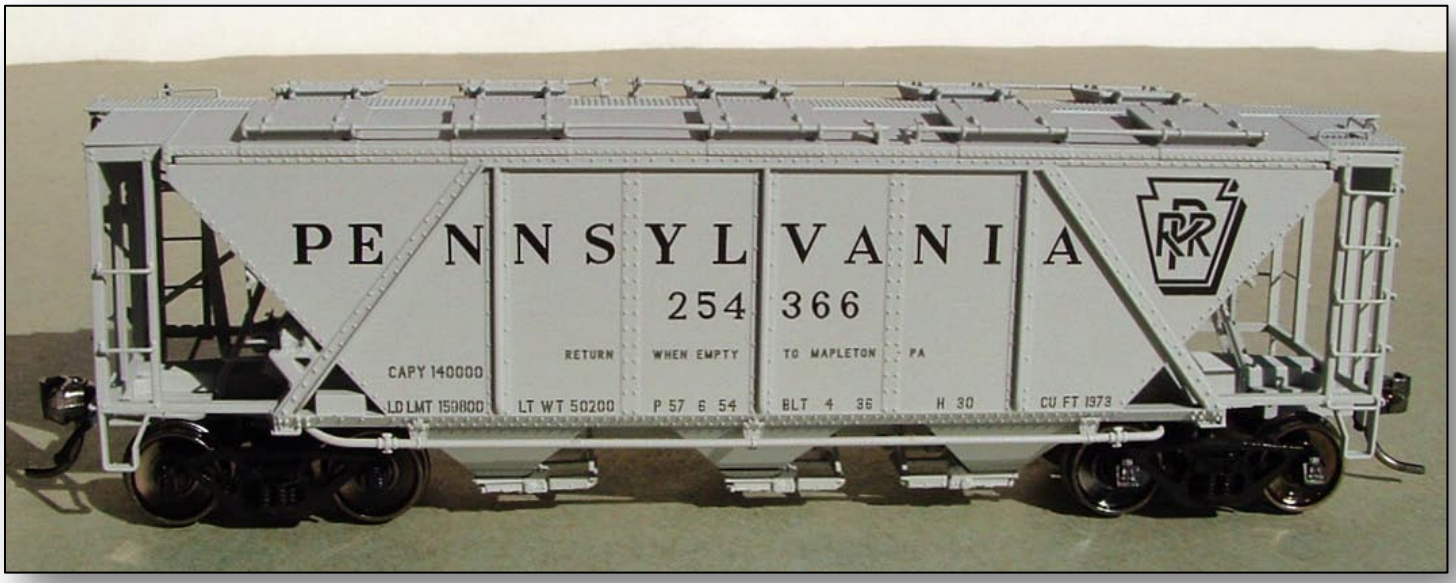
I found on my samples the metal wheels on metal axles to be properly gauged to my NMRA wheel gauge and the metal knuckle couplers are likened to the Kadee® #5. You may choose to replace your couplers with either the Accurail Accumate® or Kadee® scale couplers for more fidelity to scale. My cars weighed in at 3.56 oz which is what I would expect for a 36-foot HO scale car.

As for the separate details, they include complete brake gear, which match the drawing in the March 2001 issue of *Mainline Modeler*. The grab irons on the end and the side ladders are separate items and I was amazed at how the grabs align at the corner and are still attached to the corner post, something that takes time for a modeler to do on his own. The train line on the side of the car running from the A end to the B end is a nice detail and if you turn the model over you reveal the brake rod running down the centersill which many modelers find unnecessary in their modeling but that Bowser so nicely added – bully, Bowser! The integral running board has the diamond plate well executed. One modeler mentioned he was disappointed that the running board was molded into the roof until I told him that this was how the prototype was built. The hatch locks are connected with the rods in place and the handles properly placed in the three/two positions. The hatch hinges are finely detailed and the hatch grabs molded on. The lower hopper hatch covers and guides are nicely detailed. The brake detail inside the B end is very well done and will satisfy most modelers' requirement. There are still some that will find that they want to replace the chain with real chain links or blacken the "holes" with a bit of thinned India ink to give a bit more realistic look. Whatever your skill level, this most recent release from Bowser is just what ***The Keystone Modelers*** are looking for. The detail is on a par with what we all expect from the industry.

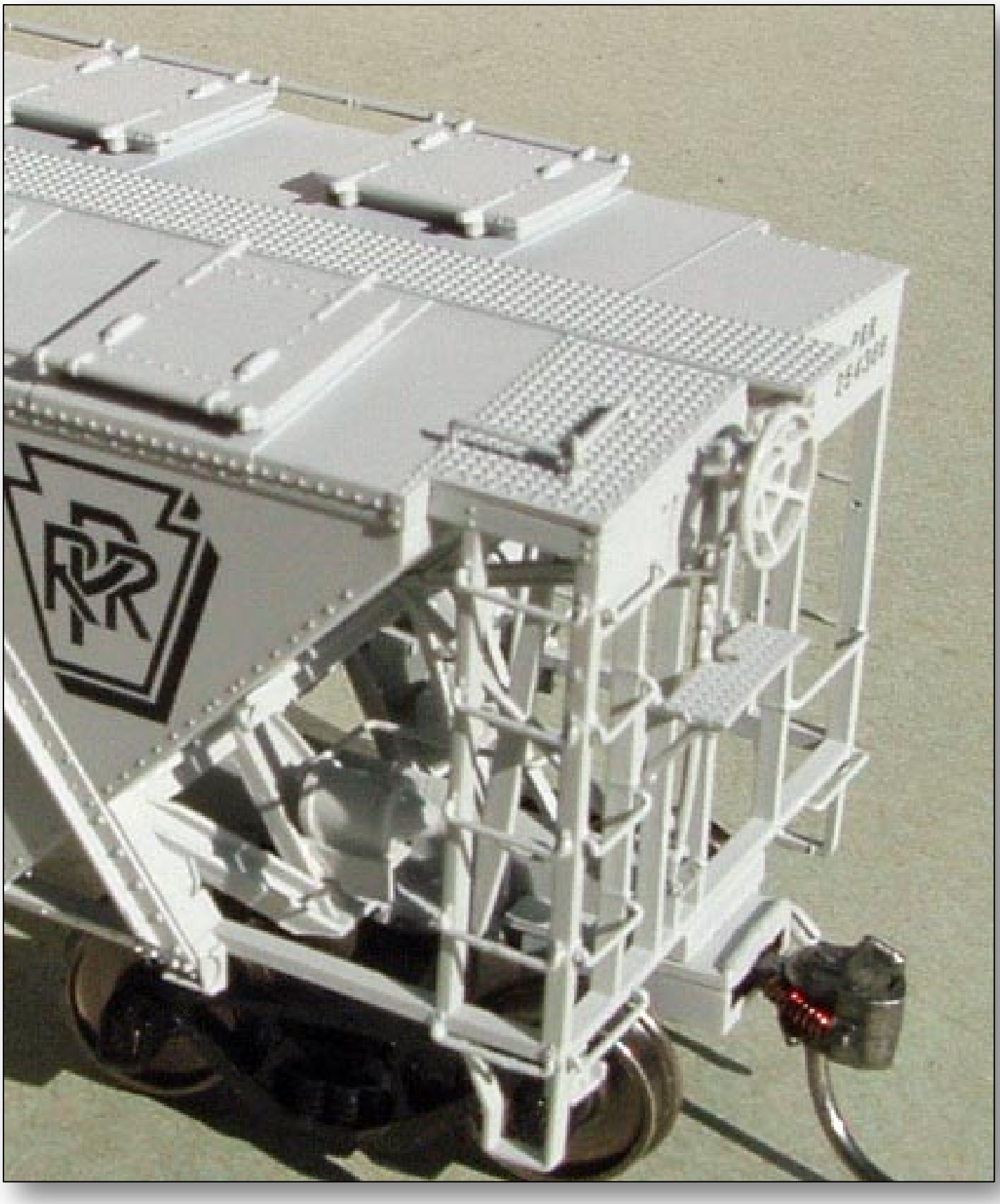
Side view of gray circle keystone scheme.

Now how many will you need? The answer is that it depends on where and when you model the PRR. If you are big on modeling the PRR's mainline you could use several, like ten. They were built to haul granulated and powdered dense products such as cement, sand, silica, slate, garnet and clay just to mention a few, so you be the judge. A mainline train could easily have that many cars rolling across the system in one train. This class, as I mentioned, was big and the cars were not often seen off line as they were kept busy on the PRR. That is what equipment utilization is all about. But as the newer class cars, the H33 and H34 (and sub-classes), were put into service these cars were reassigned to company service and could have been pulled off line to service online producers with product found in other areas depending upon online demand. Remember the mid to late 1950's was the beginning of the growth years for our nation's interstate highway system and that required lots of steel and cement. The 1950's also saw the growth in asphalt granulated roof and side wall shingles and the slate had to come from somewhere. So adjust your needs accordingly.

Enjoy this magnificent new offering from Bowser who has always kept *The Keystone Modelers* in his court. Lee English is one of the few producers that has made the effort to produce Pennsy models.



Side view of the shadow keystone scheme.

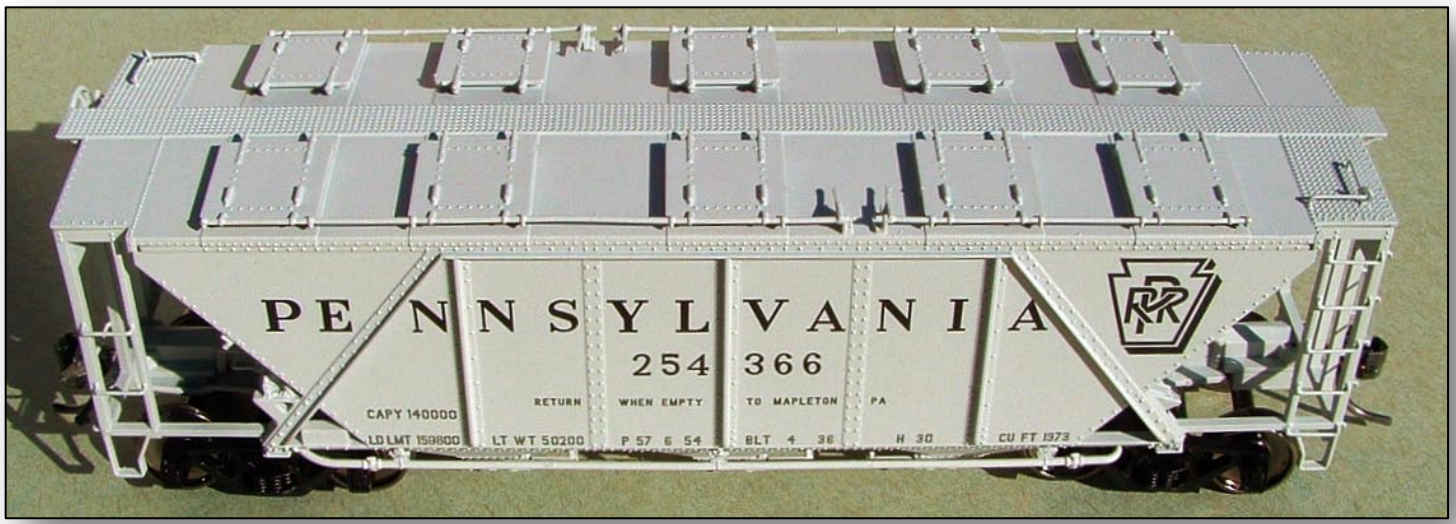


Close up of shadow keystone version shows the quality of the grab iron detail on the B-end.

Comparison end views of the gray and freight car color schemes.

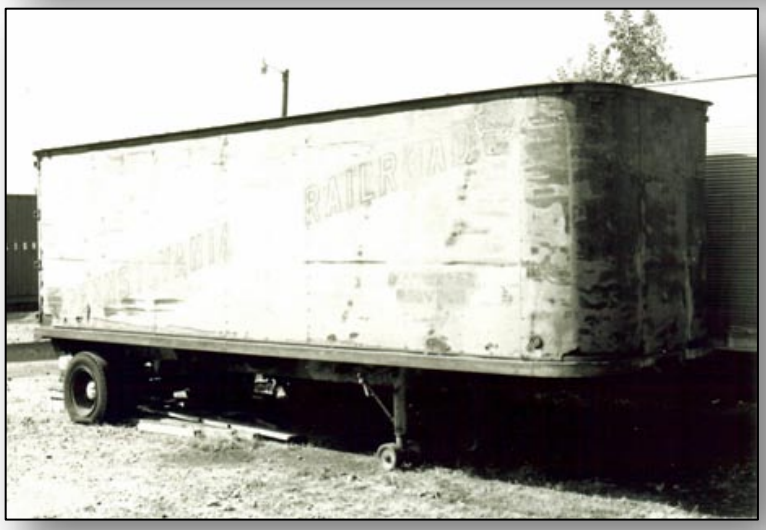
While the days become cooler and shorter you can research this model in print, my first choice, or online. Searching through books like *The Postwar Freight Car Fleet* by Larry Kline and Ted Culotta (NMRA, ©1989) yields just one photo but it is period dated and has an interesting note regarding the car in the photo. The compendium mentioned above gives insight into the paint and lettering transition of the cars. The articles in *Mainline Modeler* for their drawings are invaluable. Our own society's book, *Prophet's Pennsy* (PRRT&HS, ©2009), has yet another excellent color photograph of a period car in the Plain Keystone Gothic lettering paint scheme.

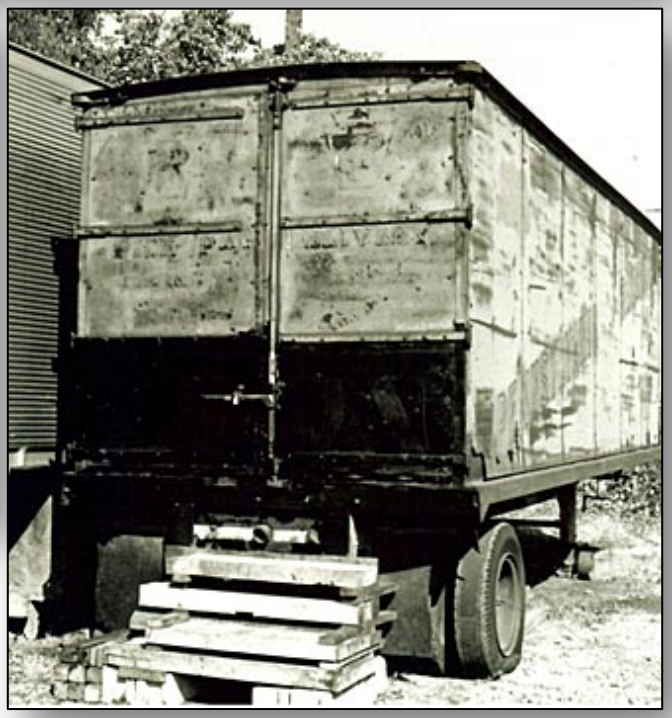
keep 'um Polished



Pennsy Merchandise and TrucTrain Trailers
Part 1b – Short Merchandise Trailers
By Curt LaRue

PRR 25′-8″ Single-Axle Smooth-Side Van Trailer





PRR Merchandise Service 25'-8"single-axle van trailer. Columbus, Oh. in 1985. *(Photo by Curt LaRue)*

Walthers 32' trailer built up. *(Photo by Curt LaRue)*

How To Make Something Out Of Nothing

Like many of you, I purchased some of the Walthers 32' van trailers when they came out, including some lettered for Pennsy. Brady let me know pretty quickly that they were not a PRR prototype. I did find a use for them. I cut the nose and rear doors off the body shell and used them to kitbash more accurate trailers. The first trailer I built of this type used the nose and doors of the Walthers trailer with sheet styrene sides and an Athearn underframe, wheels, and tires. For this article, I decided to explore whether more of the Walther trailer could be used in addition to just the nose and rear doors to create an accurate model.

Trailer Description

Length: .....25'-8"
Width: .....8'
Nose: .....Rounded Corners
Sides: .....Smooth with 47"-wide panels
Side Door: .....None
Rear Doors: .....Swing type w/extra-long strap hinges
Roof: .....Full length
Landing Gear: .....Retractable with wheels
Rear Axles: .....Single

Chassis

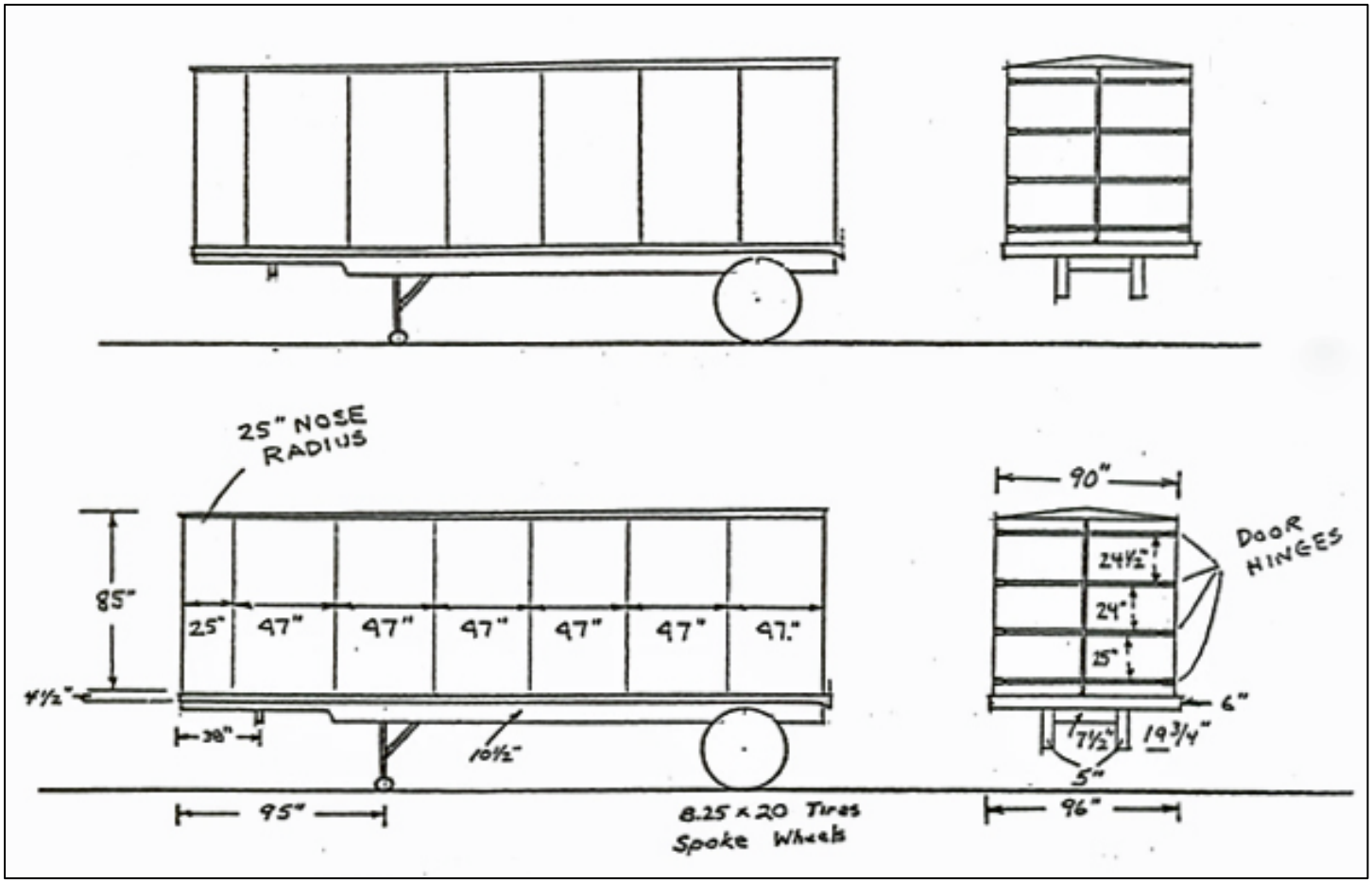
With a flat file remove four scale inches from the nose of the underframe and reshape the corners to fit the nose of the Walthers trailer body and to get the correct 5th wheel setting of 38". With a hobby saw and miter box cut the frame crosswise where the frame underbelly ends keeping the cross member. Then cut and remove three scale feet forward of the first cut. Again with a hobby saw, make a crosswise cut 10½' from the landing gear dolly just behind the front spring hanger of the tandem suspension.

Make another crosswise cut three scale feet behind last cut which is just in front of the trunion spring hanger for the tandem suspension. Discard the 3' section which removes the forward axle of the tandem. Use the rear axle and suspension. This will give you the correct spacing for the rear axle of 21½' from the nose of the trailer. Finally make the last cut by removing six scale inches from the end of the frame. Glue these frame sections together per photo. Note: The suspension of this model is a weak point with little detail. If the modeler wants a more detailed rear suspension, the suspension from an Athearn 5500-series kit can be substituted by shortening it to a single axle suspension.

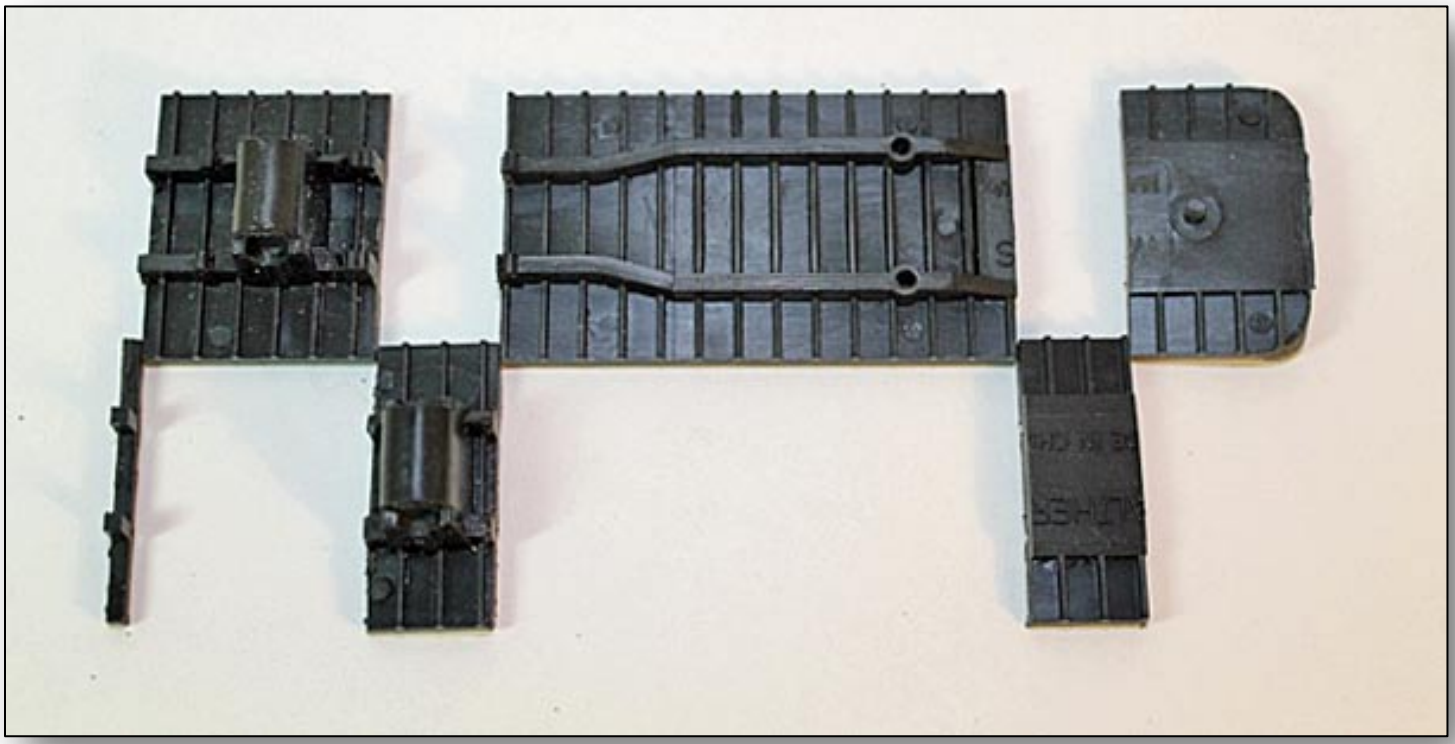
Trailer Body

Begin preparing the body by filing off the side ribs. Smooth and remove scratches by sanding with 600 grit wet/dry sandpaper. Measure up 84" inches from the bottom of the side at three points on each side and, using a straight edge, draw a horizontal line connecting the three points to mark a lengthwise cut. Next, starting at the rear of one side, lay masking tape along the marked line below the line. Wrap tape along the line around the nose and then along the line on the opposite side of trailer. This marks the lengthwise cut and the cut around nose, and it also protects the body from a miss-cut.

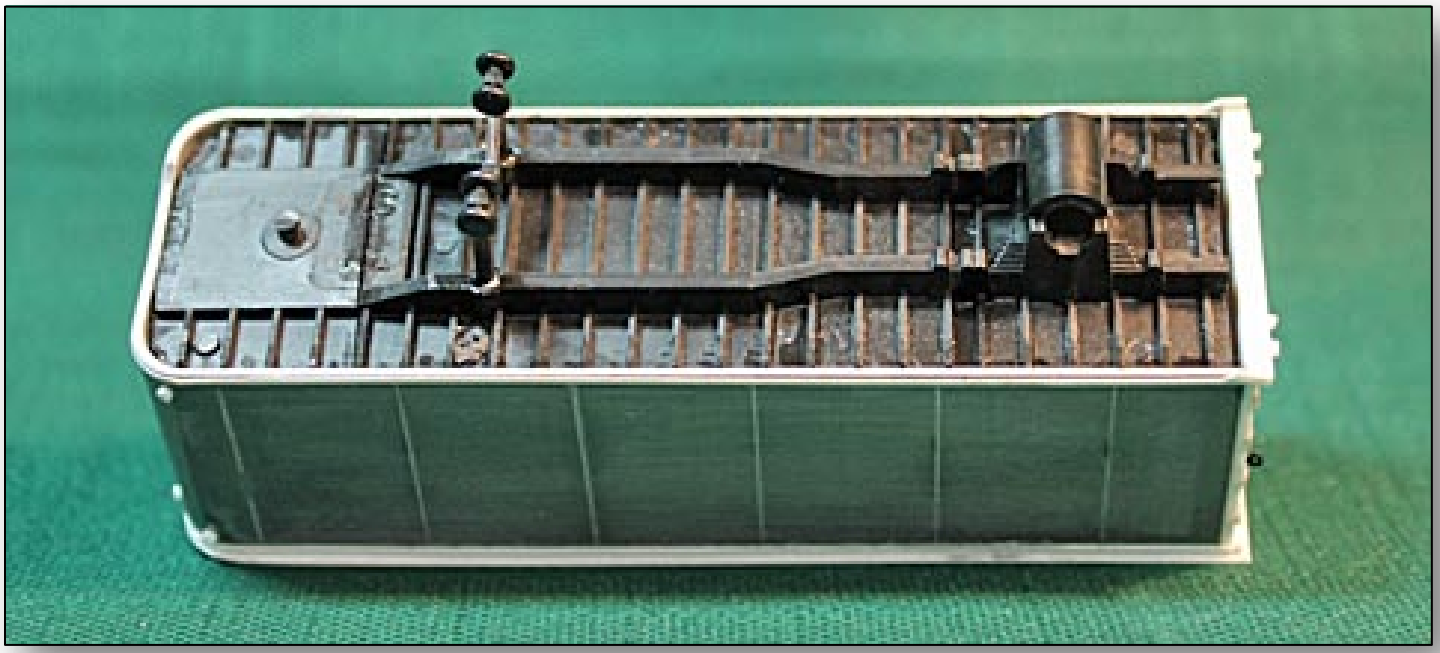
Slip the underframe into place to stabilize the body making it easier to make the cut. Lay a metal ruler along the taped line on the sides and score along the sides (but not the nose) with a sharp Xacto knife making four or five passes with the blade. Use a hobby saw to finish the cuts along both sides. After side cuts are complete, carefully complete the cut around the nose following the tape line. Discard the roof.



25'-8" smooth-side trailer. *(Curt LaRue sketch)*



Chassis cuts. Discard the sections cut out shown above.



Underside of 25'-8" van trailer with frame nested in the trailer body.

With the underframe still temporarily in place, make a hobby saw cut so that the trailer body is the same length as the frame. Put the kit doors in your parts box. I chose to fabricate new doors from .030" styrene: a scale 7'-6" by 85"high. Scribe a vertical line at the center of this piece to represent the seam between the doors. Space the door assembly evenly in the rear door opening of the body. Note that there will be about a 3" space left on both sides of the doors. Now fabricate the rear door header from a .030" styrene strip scale 8' wide and 6" high.

Note that the rear header and roof have an arch. To model the arch, mark the center of the header piece and taper it from the peak to 3 inches high at both sides and cement it in place. Cut two styrene strips, three by three scale inches to create the vertical rear door posts and cement in place at the sides of both doors. The rear door assembly should be flush with the sides. Now scribe the seams for the body side panels spaced at 47" OC per the drawing, beginning at the rear.

Fabricate a lower sill batten from 1"x 3" styrene strip. Start by cementing the 1" x 3" batten at the rear of one side working forward along the side. Keep the batten flush with the bottom of the side and run a thin bead of liquid styrene cement along the batten as you work forward along the side, around the nose, and down the other side leaving the excess 1" x 3" material in place until the cement dries. After the cement has dried, trim the batten flush with the rear of the body. Do the same at the upper edge of the body at the roof line. The upper batten will provide an opportunity to camouflage any imperfections in the roof cut line. Finally cement a 4" x 4" styrene strip x 85" at the bottom of the rear doors to represent the rear threshold.

Roof

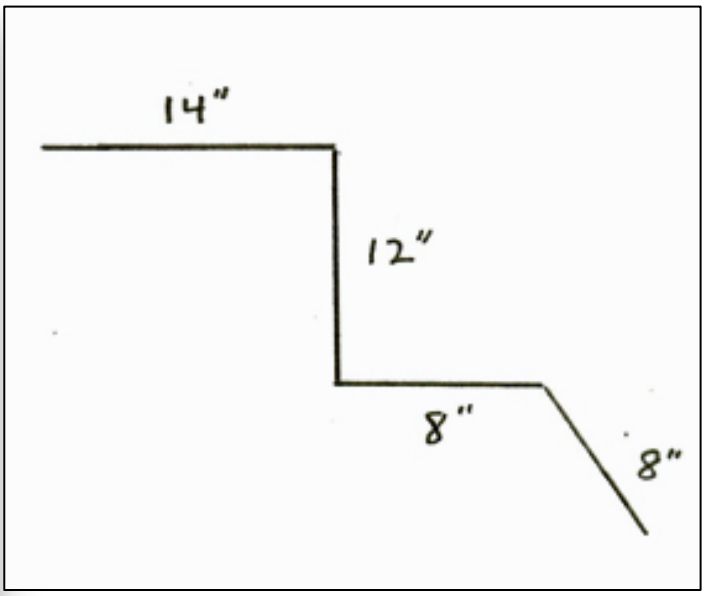
Lay the trailer body on a sheet of .010" styrene with the roof edge down. Trace around the outline of the body and cut out the roof. As mentioned above, the rear of the roof has a slight arch, but the front does not. To simulate the arch, scribe a centered line on the underside of the roof 10' long from the rear of the trailer roof. This will make it easier to form a gentle arch in the rear of the roof. To make the arch, lightly bend the scribed portion of the roof with your fingers and cement the roof in place with the scribed arched rear portion of the roof resting on the tapered upper rear door header. After the roof has dried in place, file the roof edge to give a slight 1 inch overhang all the way around the roofline.

Landing Gear

Use the landing gear from the Walthers kit. Cement landing gear lugs in frame holes at 95"from the nose of the trailer. Note that this landing gear has a narrow stance which is correct for this trailer.

Wheels and Tires

The wheels and tires from this kit are unusable, so discard them. Use the wheels/ tires from an Athearn 5500 Series 40' trailer kit. Many modelers have these kits sitting on their *stock* shelves. If you don't have any, they are readily available at flea markets. These have the correct cast spoke wheels, and the axles easily fit into the kit axle holes. If you can't find any Athearn kits, cast spoke wheels are available from A-line or pirate them from a Classic Metals model. These axles will require a little more work on the suspension/ axle holes to make them work.



▲ Sketch of landing gear crank.

◄ Unpainted rear of 25'-8" van trailer.

Rear Door Hinges, Door Latch Bar, and Chain Retainer Ring

The rear doors had extra long strap-type hinges that nearly spanned the full width of each door. To model these hinges, I used Tichy #3068 Large Strap Hinges. These hinges are about 1' short, so I cut 1' from another strap hinge and tacked it into place at the end of the full length hinge when it was cemented into place. Each rear door had 4 hinges. I used a Grandt Line #5167 Standard Gauge Reefer Car Door Latch Bar to represent the vertical door latch bar. Cut the latch bar to length and cement in place on the right hand rear door near the door seam. To finish the rear door details, drill mounting holes at the midpoint of both the right and left hand rear door posts for Tichy #3037 Eyebolts which will hold the rear door retainer chain.

Marker and Stop Lights

Trucks and trailers used three types of marker and tail lights.

- *Flush Mounted* were mounted flush with the mounting surface.
- *Bezel Type* were mounted in a housing that protruded from the mounting surface.
- *Stand Alone* were mounted in a housing that was hung on a bracket separate from the trailer body. Tail lights were often mounted this way below the rear threshold of the trailer.

For this trailer, I used the "bezel" type. To make the bezels, I made thin slices of 4" dia. styrene rod. Before you make the bezels, paint the rod the base color of the bezel. Bezels were usually chrome, body color, or black. Being uncertain of the bezel color, I painted them the body color – red when I painted the trailer. If you choose chrome or black, apply the bezels after the trailer body is painted.

Landing Gear Crank

Make the crank from .010" or .015" dia. brass wire, bending the wire per the drawing. Drill a hole near the top of the landing gear on the right hand side to accept the crank and cement in place. After cementing the crank in place, you may need to bend it slightly to make it look like it has been retracted or folded back.

Painting and Lettering

The trailer body was painted a bright red. I painted the body Floquil Caboose Red. [ed. note: The original Floquil bright caboose red has been unavailable for many years, so another paint will have to be substituted.] The frame, chassis, landing gear, and wheels were painted yellow with Testors Modelmaster Chrome Yellow. The roof was painted with Testors aluminum. The tires were painted with Polyscale grimy black. The trailer body was lettered with "PENNSYLVANIA RAILROAD" diagonally from lower left to upper right with a 17" Keystone at both ends.

Unfortunately, there is no decal set currently available to letter this trailer. John Franz is developing an accurate decal set to letter this and other TrucTrain trailers. Fortunately, I had a "stash" of Bethlehem Car Works Kit Bits PRR Trailer Decals #13. The decal set was designed to be used on a 32' trailer which makes the lettering band too long. To properly space the lettering I had to cut out each letter separately leaving the red background. As I started applying the letters, the decals started to break apart. To stabilize the decals, I oversprayed them with Floquil Clear.

I didn't have a number for this trailer so I left it off. I applied 17" keystones centered on the nose and both rear doors. See photos for placement.

I painted the rear doors black below the third hinge from the top. I then applied a "Blow Two Shorts to Pass" decal over the black. This decal came from a custom set our Cincinnati group had made locally. Just above the third hinge I applied a "Pick Up And" on the left door and "Delivery" on the RH door which came from the BCW #13 Decal Set.

FINISHING THE MODEL

Overspray the model with clear gloss or clear flat to seal the decals. The easy way to paint the marker and tail light lens is to dab the tip of a .020" or .030" dia. styrene rod into the paint and then to lightly touch the center of the light bezel with the tip, leaving a round puddle of paint centered in the bezel. The marker lights on the nose and sides were amber. I used Testors gloss orange. The tail lights are red. I used Testors Tail Light Red which makes a convincing tail light. I next installed the tailgate restraining chain using 40-link-per-inch chain. Both ends of the chain are installed in the tailgate chain restraining chain eyelets. There should be a slight "droop" in the chain. Mudflaps were fashioned from .005" styrene sheet. The mudflaps should be slightly wider than the dual rear tires and about 8" from the ground. I made mine 24" wide x 40" long and then cemented them in place with ACC. Paint the mudflaps black.

Finished 25'-8" van trailer kitbash.

▲ Left hand ¾ view of 24' open-top van trailer from p. 40 Autumn 1992 *Keystone*.

► Right hand rear ¾ view of 24' open-top van trailer from p. 21 of same issue.

(Both photos Andrew J. Hart Collection, appeared in Nesladek article, ibid.)

This model was inspired by the above photos of trailer #24W600 which appeared on pages 40 and 41 of the Autumn 1992 TrucTrain article by Mike Nesladek. On these early trailers, the first two digits of the trailer number indicated the trailer length. I tried cross referencing this trailer number in my ORER's but couldn't find it listed. After examining the photos, I felt that this trailer could be modeled using the same techniques as on the 25'-8"smooth-side van above. Not having actually seen and measured this trailer, I had to make some educated guesses as to its actual dimensions.

The main features of this trailer are:

Length: ..... 24 feet (it could have been 24 ½ feet)
Width: ..... No wider than 8 feet
Nose: ..... Rounded
Sides: ..... Smooth with tarp tie off rails
Side Door: ..... None
Rear Doors: ..... Swing type with extra-long hinges
Roof: ..... Partial tarp top. Note that the side tarp tie down bar is not full length. It runs from approximately in line with the landing gear to the rear of trailer. I believe that the front part of the roof had a conventional metal roof from the nose to just aft of the landing gear.
Landing Gear: ..... Narrow with wheels

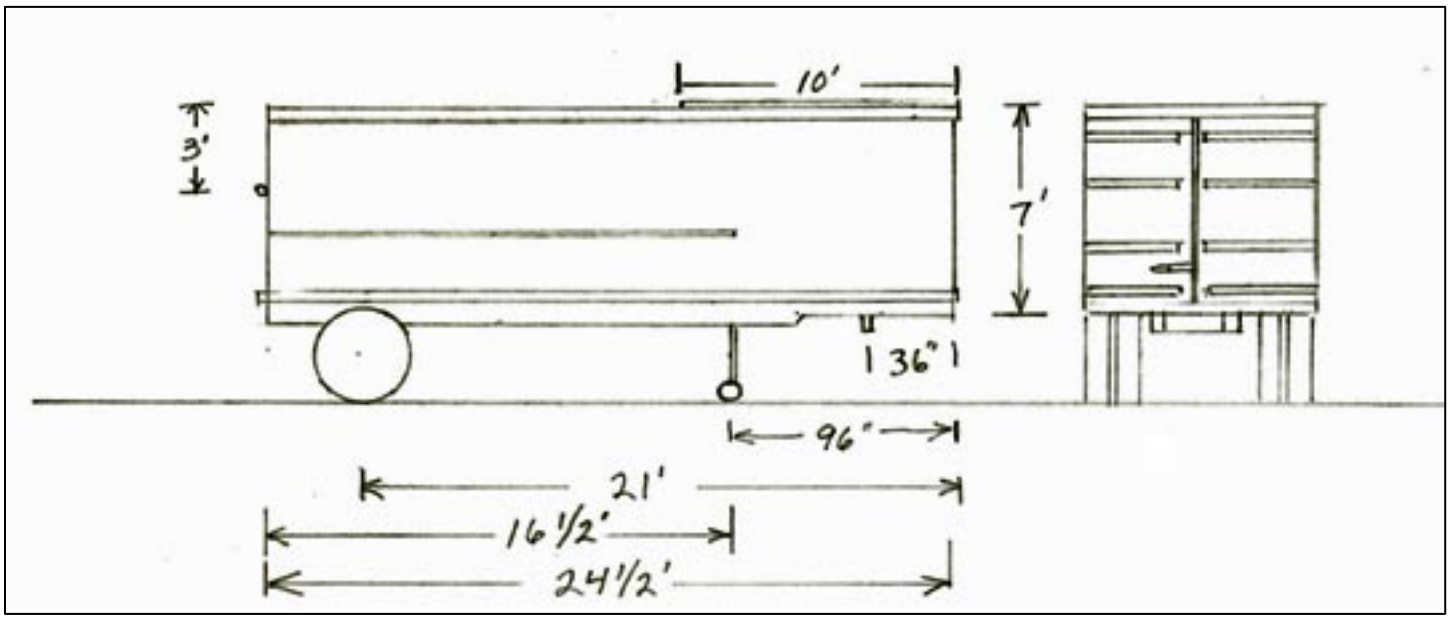
BUILDING THE MODEL

For this project, I again used the Walthers 32' Van Trailer for the base model.

Chassis – Modify the Walthers chassis as on the 25'-8" smooth-side van trailer above. Note that this trailer is shorter, but I used the same kingpin, landing gear, and rear axle spacing. Take the 6"out at the end of the chassis. After you have sectioned the chassis, cement the sections together.

Trailer Body – Prepare the trailer body as on the 25'-8"smooth-side van trailer above. Cut the trailer body to length per the sketch, and then cement the rear door assembly in place as on the 25'-8"smooth-side van using the .030" styrene. Fabricate the rear door header as above but note that there is no arch in the rear top header section or roof. The top of the header should be flat. Do not scribe body side panel seams as the side of this trailer appears to have none. Both the lower sill batten and the roof batten seem to be heavier on this trailer than on the smooth-side van trailer. Cement 2" x 4" inch lower side sill and roof battens in place using the same technique as above.

Next fabricate the side tarp tie down bars. I made the side stand off pieces from .040" dia. styrene rod about 22' long. This makes them a little too big but easier to work with. I cemented five stand offs per side spaced 42"apart and up 30" from the bottom of the side. After the cement has set, cement a piece of .010" dia. styrene rod or piece of .010" dia. brass wire onto the standoff pieces. To finish the basic work on the body, cement a 4" x 4" x 85" styrene strip in place at the bottom of the rear doors to represent the rear threshold.



Sketch of 24' open top van trailer

Completed 24' Open Top PRR Trailer. *(Photos by author)*

Views of the sides, front, back, and top of the 24' open-top model before painting.

Roof

From the photos, it appears that the front part of the roof has a normal metal roof back to just aft of the landing gear. I made the roof 10′ long from the nose from .010″ styrene. The balance of the body length was left open as a canvas tarp covered this portion of the roof. I cemented four .060″ dia. styrene rods in place crosswise to serve as supports for the rear tarp. These crossrods should be placed so they are flush with the top of the sides. The rear tarp was installed after the model was painted and decaled.

Final Details

- Landing Gear – Use the landing gear from the Walthers kit.
- Wheels and Tires – Use wheels and tires from an Athearn 5500 Series 40′ Trailer Kit.
- Rear Door Hinges, Latch Bar, and Chain Retainer Ring – The rear doors hinges and latch bar appear to be the same as on the smooth side van trailer so install these parts and the chain retainer ring as on the above trailer.
- Marker and Stop Lights – Do the same as on the 25′-8″ smooth-side van trailer.
- Landing Gear Crank – Same as above.

Painting and Lettering

The trailer body and chassis was most likely painted the same as the above trailer. As before, I painted the trailer body Floquil Caboose Red and the Chassis and wheels Testors Model Master Chrome Yellow. There is no indication of the forward roof color so I painted it Testors aluminum. Again, if you are lucky enough to have a set of the BCW Trailer Decal Set #13, you will need to cut the letters out and apply them individually as on the above 25′-8″van trailer. This trailer does have a trailer number. Cut the numbers out from the same set and apply them as pictured. Applying the decals on the side will be a little tricky because you will have to contend with the tarp tie down supports and bar. It may be necessary to put a small slice in a decal letter to fit. Overcoat the decals with a clear flat to seal them and hide any seams.

Tailgate Restraining Chain

Install as on the above trailer.

Tie Down Ropes

The tie down ropes appeared to be light in color, so I used short strips of light tan sewing thread to replicate the rope. I made a small loop knot with the thread on one side of the side tarp tie down bar and then brought the thread up over the top of the sides and down to the opposite side tie down bar and tied it in place. I secured the "rope" with a small drop of ACC over the knot and at the top of the side. Trim off any excess thread. Do the same for the rear door ropes by securing one end of the thread to the inside of the doors with ACC and tying the other end onto the rear tailgate restraining chains.

Roof Tarp

Cut a 12′ by 17′ piece of the packing tissue from the Walthers kit. Make up a mixture of 30% water and 70%white glue or use Clear dope as on a stick model airplane kit. With a brush apply some of this mixture on the underside of the tissue about 1′ wide on the front and sides, being careful not to get any of the mixture on the sides below the bottom of the tarp. Center the tissue so there is equal overhang on both sides and about 6″ on the front section of the roof. When you are satisfied with the fit, paint over the rest of the tissue with the water/ glue mixture, except the rear that will come down over the rear doors.

Now paint the underside of the rear tarp overhang on the rear doors with the water/ glue mixture. Starting at the center, pull the tissue down over the top of the rear doors then pull the loose tissue from each side into a dart that overlays the center. Paint over this rear part of the tarp with the water / glue mixture. After the first coat of the water/ glue mixture had dried, apply another coat of the mixture and let dry. Paint the tarp Grimy Black. Give the whole model a light overspray of Clear Flat to seal everything.

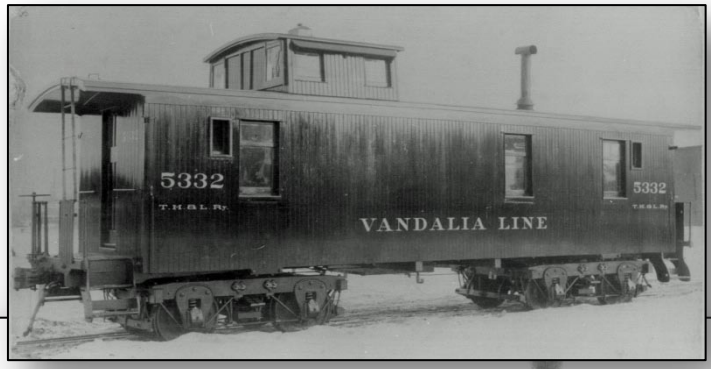
Modeling a Vandalia Wood Cabin Car in N Scale

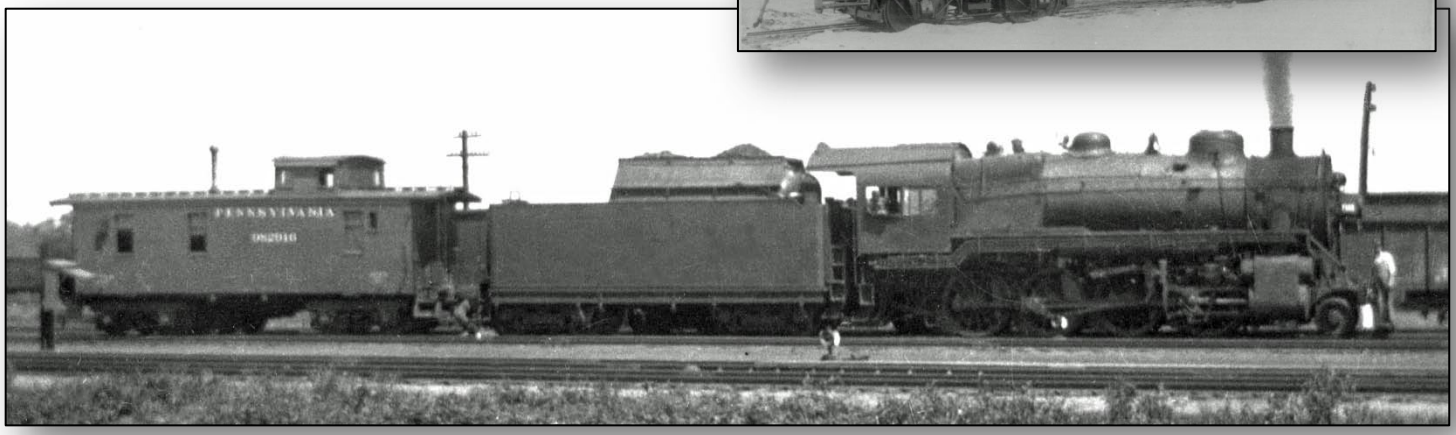
by Claus Schlund

PRR #982016 (likely ex-Vandalia #5316) trails a private-owner GLA hopper on a coal drag

Being a predecessor line, the Vandalia had its own collection of rolling stock which fell distinctly outside the strict standardization imposed by the PRR.

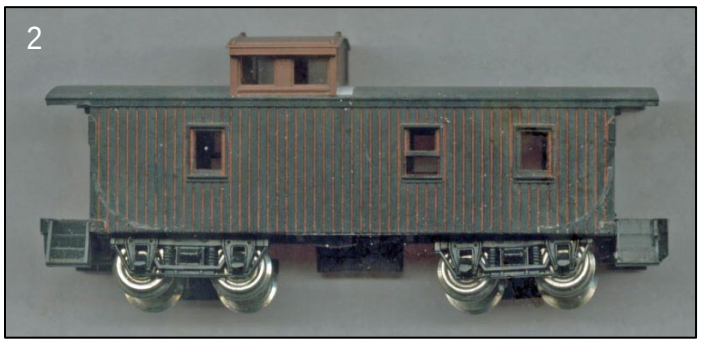
Once the Vandalia was merged into the larger PRR system proper, a series of Vandalia wood cabin cars built by American Car & Foundry (AC&F) became part of the PRR roster. While PRR historians and researchers are still somewhat uncertain on this, there is discussion that these cars might possibly have been classified by the PRR as the 'mysterious' class N6 (no letter suffix) – more research remains to be done on this topic before the definitive answer is known. Inspecting a close-up and looking over the details (what few can be discerned in the fuzzy prototype photo, anyway!) of this Vandalia cabin, I concluded a combination of carbody, cupola, and trucks from three disparate sources could make a very plausible model.





▲ N6 #982016 in "no keystone scheme #2" with Lines West H10s. (Above) ACF image of Vandalia Line #5332.

1. Start with a Minitrix caboose body.

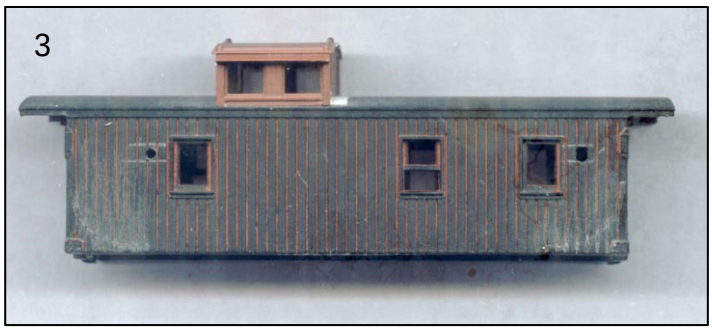


2. Take everything apart, and file down the body bolsters from a thickness of 0.145″ to 0.120″ (removing 0.025″) – this will allow the car to sit at the proper height over a pair of Bachmann old-time passenger trucks. Use a set of Micro-Trains #1128 couplers in the existing draft gear box. Fill the smokejack hole on roof if you have the factory smokejack, then glue the factory smokejack in place and trim flush when dry. My smokejack was missing so I drilled the hole out to 1/16″ and glued in a piece of 1/16″ dia. plastic rod instead.

Sand all roof detail off of the roof until the roof surface is smooth. The cupola needs to move closer to the end of the car than it was in the factory model, so close off some of the cupola opening in the roof by gluing two thicknesses of 0.080″ styrene into the opening. Allow glue to thoroughly set and sand to match roof contour.

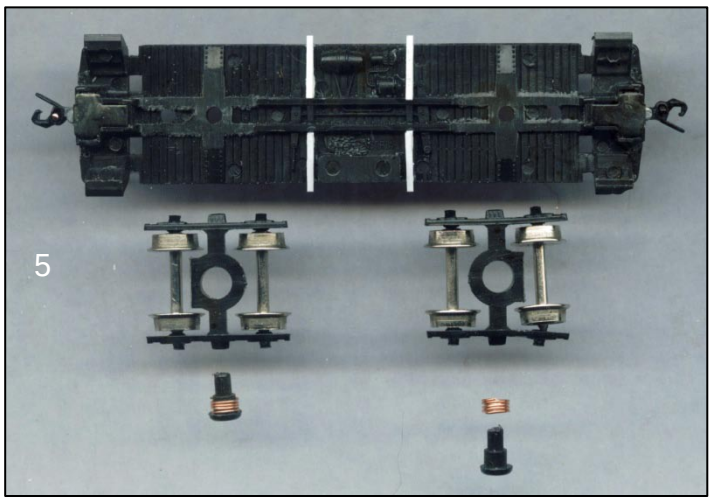
Use a Micro-Trains wide caboose cupola to replace the factory cupola. The Micro-Trains cupola bottom surface is not an entirely exact match to the Minitrix caboose roof, so lightly file or sand the cupola bottom in the right spots to improve this fit. In addition, extend the cupola opening a bit on the other end to align the end of the cupola with the edge of the window opening on the car side.

Remove the factory end railings. Glue the mounting pins cut from the factory end railings into the mounting holes on the end platform and trim flush with end platform surface – discard the crude factory end rails, we will not be using them. Remove the molded-on factory side railings. Assemble everything and it should look like the image above. Do a quick test of the running gear, correcting any problems and making sure couplers are at the proper height.

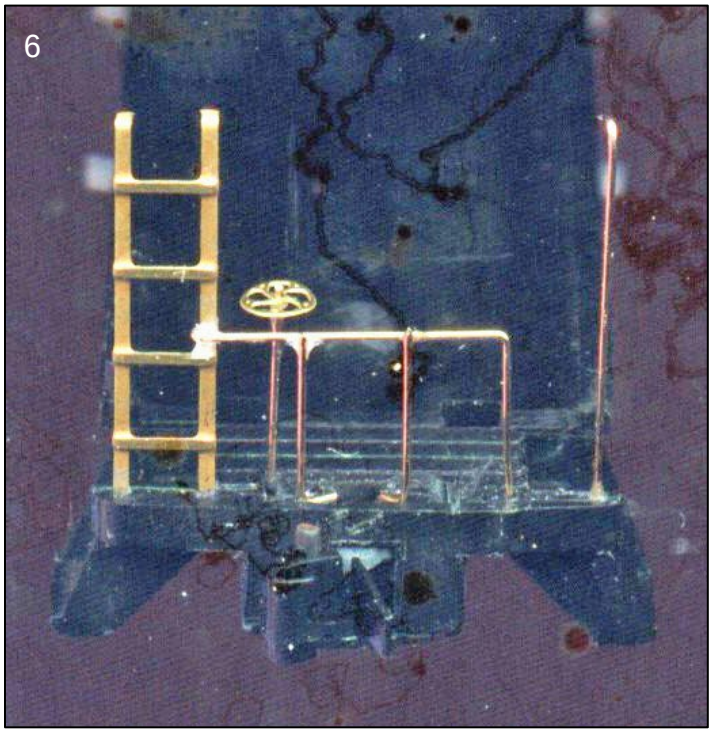


3. Cut holes for the Watts marker lights. Do this by first making a round opening with a drill and then using an X-Acto #11 blade to carve a more-or-less rectangular opening.

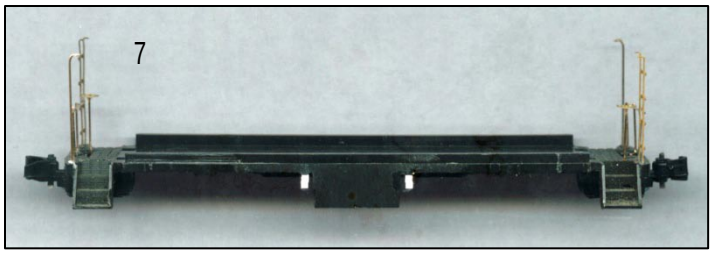
4. Frame the Watts marker light openings with 0.010″ x 0.010″ styrene strips. Having moved the cupola closer to the end means we find the factory roofwalk will no longer fit. One section will be too long and the other too short. Cut the too-long roofwalk to be a bit shorter and glue the removed section of roofwalk material onto the too-short piece of roofwalk to lengthen it. Sand off the molded-on grab detail from the cupola roof. File the round factory roofwalk mounting pins to have a narrow profile, and add extra roofwalk supports made from 0.010″ x 0.020″ styrene evenly spaced at 1/8″ intervals. Glue the roofwalk to the carbody roof. Make J-shaped side railings by bending 0.010″phosphor-bronze wire around a 1/8″ drill bit shaft. The wire will spring back somewhat after forming, so experiment until the result you get is a 90 degree curve. Install on the four corners of the cabin car body.



5. The Bachmann trucks have a 0.147″ bolster hole, but the bolster pins have a 0.112″ diameter shank, which means there is too much back-and-forth slop in the fit of the trucks. Fix this by wrapping a spiral of 0.015″ diameter copper wire around the shaft of a 0.104″ drill bit. Trim the resulting spiral to an appropriate length and slip it over the truck bolster pin shank to get a good fit between trucks and bolster pins. Add caboose underframe body supports made from 0.030″ x 0.030″ styrene stock.



6. Add end ladders made from Gold Medal Models #160-15 Freight Car and Industrial Ladders and end railings bent from 0.012″ phosphor-bronze wire. The prototype car image is too fuzzy to make out the exact end rail configuration. All I could see was that the end ladder was at its standard location, so I simply configured the end rails according to standard PRR practice of the time. Now is also a good time to add roofwalk end supports bent from 0.010″ phosphor-bronze wire.



7. Since I wanted the carbody to remain removable, all the end railing parts are spindly little things sticking straight up into the air. Use caution since one careless move could wipe out an afternoon worth of work!

8. Drill a 0.063″ hole to install a Micro-Trains caboose smokejack. Add window muntins using 0.020″ x 0.020″ styrene stock. Paint the carbody and underframe PRR Freight Car color. I use a mix of equal parts Floquil Boxcar Red and Zinc Oxide Primer for this.

9. Once the paint is fully cured, apply a coat of Testors Glosscote. Apply decals lettering the car as PRR 982016. I had trouble finding a decal sheet that had the word PENNSYLVANIA with sufficiently close spacing – in the end I went with Mount Vernon Car Shops decal sheet "N PRR Wreck Derrick Decals". NORTHEAST Decals "Standard Boxcar B&O-09" provided the digits. After the decals are fully set paint the car with Testors Dullcote. Weather the car and then glaze the windows. Add a 0.25 oz lead weight to the car interior. As can be seen in this broadside view, the car is ready for service.

10. An in-service shot showing the other side of the car.

11. PRR #982016 brings up the rear of a freight train.

Acknowledgements

Before closing, I need to acknowledge the generous help of the following individuals without whom this project would not have been possible. If I have omitted anyone, please understand it is due to my own clumsiness!

Rich Burg
Bob Johnson
Rick Tipton
Gary Rauch

References

The Keystone, Vol. 43 No. 3 p. 38, has images of Pennsylvania #982016 and also Vandalia #5316 (likely the same car).

Pennsy's Northern Region

Images on John Johnson's Layout

Photos by John Johnson

John is an NMRA Master Model Railroader from Franklin, Virginia. He indicated these are prize-winning images of his HO-scale layout set in early September of 1955. One of his images is featured in the 2014 NMRA Calendar.

M1A #6738, a Broadway Limited Imports model, heads under an overpass.

▲ M1A #6738 passes a position light signal, ▼ then continues along a river.

▲The M1A passes a crossover. ▼ ALCo FA1 #9605 (PRR class AF15) leads a freight.