The Keystone Modeler

Pennsylvania Railroad Technical & Historical Society

No. 87 Winter 2014

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The Keystone Modeler
Pennsylvania Railroad Technical & Historical Society

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FRONT COVER, TOP
A Fruit Growers Express refrigerator car in HO from an Intermountain kit. (Photo and model by Bruce Smith)

FRONT COVER, LEFT
A completed model of the Shamokin, Pa. ash hoist. (Photo and model by Chuck Cover)

FRONT COVER, MIDDLE RIGHT
A Scott Brothers 30' trailer in HO scale. (Photo and model by Curt LaRue)

FRONT COVER, BOTTOM
An HO-scale 30' single-axle trailer for PRR TrucTrain service. (Photo and model by Curt LaRue)

BACK COVER
Leased Reading T-1 4-8-4 meets a PRR M1B 4-8-2 during the 1956 traffic surge. Models are by Broadway Limited Imports on Tim Garner's Willsburgh Division. (Photo and models by Tim Garner)

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
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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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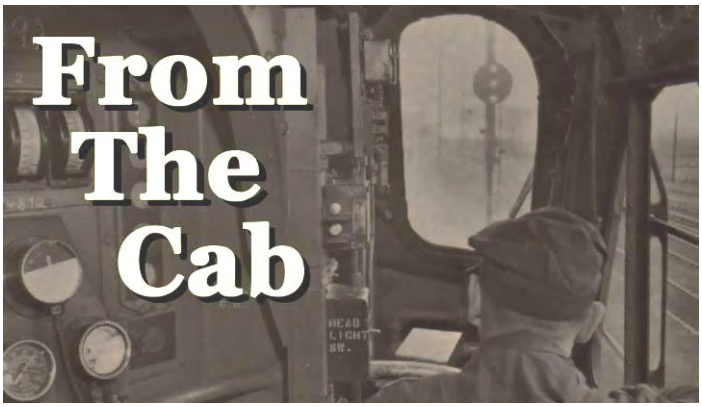

I'm going to be a bit of a curmudgeon in this editorial and get a couple of things off my chest.

Firstly, I am glad that there is continued interest in CD-ROM orders for our past issues. Unfortunately, because back issues of *The Keystone* are ordered from Al Buchan, some folks just assume that they can order both from him. But it is an extra bit of trouble to handle things that way, and it delays processing. Please remember to place your order with me (see ordering instructions on page 2).

Secondly, (and I say this from the perspective of an editor and former educator) I wonder whether anyone re-reads what he/she just wrote before sending it out into the ether. By now, we should all realize that any email or text we send will continue to exist somewhere in some server forever. It is always a good idea to run an article, or even an email, through spell check and, especially in the case of a submission to a publication, to have a friend or family member look it over.

We all do make mistakes. Sometimes all it takes is accidentally hitting the wrong key to make the writer look foolish or careless. Those of us who edit Society publications make every attempt to standardize PRR terminology, abbreviations, and punctuation. A few years ago, Chuck Blardone assembled the *Keystone Style Manual* which has been very helpful in this regard. It's available on the Society web site at http://prrths.com/Keystone. Please review it before submitting an article to *The Keystone Modeler*. Also, please submit the text in Times New Roman font size 12, and submit the photos separately from the text. The photos are much easier to work with when they are separate from the text.

Well, I'll get down from my soapbox now, and invite you to enjoy the winter 2014 TKM. We have another interesting reefer kitbash from Bruce Smith, and we all need reefers on our layouts, even if they were not PRR owned. Chuck Cover explains how he modeled the coal and ash hoists at Shamokin, and Curt LaRue provides us with another installment of modeling PRR trailers.

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
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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:

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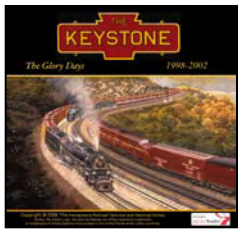
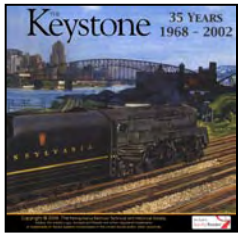
The Keystone CD 5



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

(Bowser)

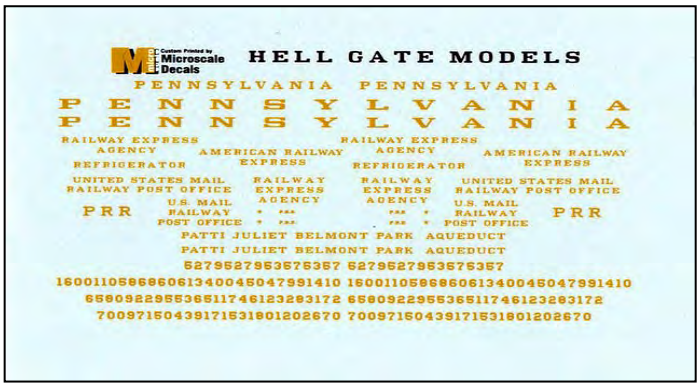
Bowser has announced a second run of this very popular unique PRR car. In addition to new road numbers in the same paint schemes, shaker brackets are included on the side of each of the bays. See the website or *Keystone Crossings* for the new road numbers.

BROADWAY LIMITED IMPORTS
http://www.broadway-limited.com/
PRR H10s – HO scale

PRR 90F82 Tender. *(Barry Yankolonis)*

With the expected delivery date of the first run now April 2014, **BLI** has announced a second run of their much anticipated H10s. Although an anticipated delivery date is not known yet, this model will represent the engines equipped with stokers and the 90F81 tender. The 90F81 tender was a modification of the 90F82 used on the I1s, shown above. It is unknown if the model will include the doghouse. The prototype H10s engines with this tender were seen with and without it. Initially after the postwar conversion, the engines with this tender class were assigned to the Middle Division, but at least one eventually made its way west to Ohio.

HELL GATE MODELS
http://hgmtest.weebly.com/index.html
PRR Head-end Car Decal Sheet – N Scale



Although this decal sheet isn't new, **Hell Gate Models** now has it available separately. Also, to augment their very popular B60B and BM70K, which are currently sold out, they have another PRR head-end car in development. Watch the web site for details.

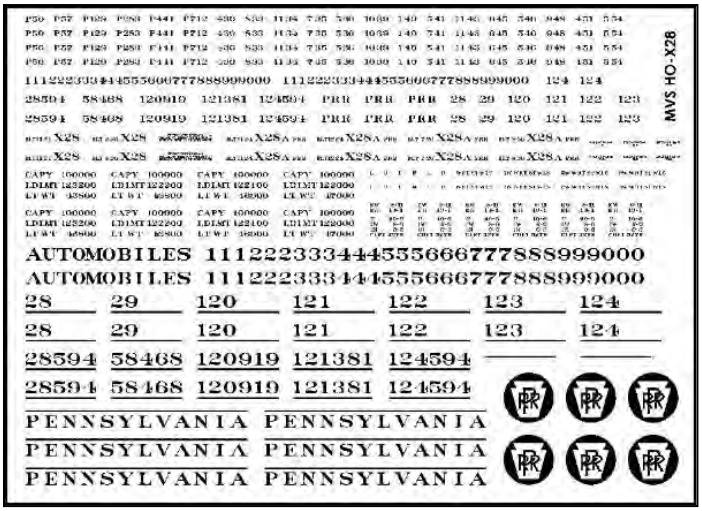
JERRY GLOW DECALS
http://home.comcast.net/~jerryglow/decals.html
PRR GLCA and Coal Goes to War Decals – HO Scale

Jerry Glow has available decal sets for the Funaro & Camerlengo GLCA hopper which includes the Coal Goes to War placard, which is also available separately.

PRR X32B Decal Set – S Scale

Previously available in HO, **Jerry Glow Decals** now has this set available in S.

MOUNT VERNON SHOPS
http://www.mountvernonshops.com/
PRR X28/X28A Decal Set – HO Scale



John Frantz has added this set to his excellent line of decals. There is enough data to complete 3 cars with data included for one X28 and three X28A. Specific data is included for X28A 124594 which has been confirmed to have been converted to narrow gauge trucks on the East Broad Top in 1952.

Upcoming Events

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

April 12-13 Timonium, Maryland
Great Scale Model Train Show
http://www.gsmts.com/

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

May 30-31 Collinsville, Connecticut
New England/Northeast Railroad Prototype Modelers Meet
http://www.neprototypemeet.com

Advance Planning

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

August 8- 9 Collinsville, Illinois
St. Louis RPM Meet
http://icg.home.mindspring.com/rpm/stlrpm.htm

September 12-13 Fredericksburg, Virginia
Mid-Atlantic Railroad Prototype Modelers Meet
http://www.marpm.org/

September 19-20 Kennesaw, Georgia
Atlanta Prototype Modelers Meet
http://www.srha.net/public/conventions/2014_Atlanta_RPM_meet.htm

October 9-11 Lisle, Illinois
Naperville RPM Conference
http://www.railroadprototypemodelers.org/naper_meet.htm

Modeling FGE/WFE/BRE Refrigerator Cars – Part 3
The 1927-28 FGE Refrigerator Cars

By Bruce Smith – photos by the author

A side view of the model showing the lowered height as well as the removal of the plates from the side sill.

In the previous installment (*TKM* 84, Spring 2013), I gave some background on two of the signature cars for Fruit Growers Express (FGE), the 1921-22 cars and the 1927-28 cars. In that installment, I also discussed how to model the 1921-22 cars using the Accurail wood reefer as a starting point. In this installment, I would like to discuss how to model the 1927-28 cars using the Intermountain FGE refrigerator car.

As you may recall from Part 2, the major spotting differences between the 1921 and 1927 designs are the height and side sill. The 1921 cars were 10′-2″ from the rail to the eave compared to 10′-7″ for the 1927 cars. The 1921 cars had 6″ side sills with the cross-bearers visible below it, while the later cars had 8″ side sills and hidden cross-bearers. As I noted, in the early 1950s, the 1927 design was modified by increasing the eave height 4″ to 10′-11″. The car was given an internal steel superstructure and this was in turn tied into the side sill with rivets, creating a series of riveted plates visible on the sill. The post-war rebuilding affected a few other details, but these are the most notable.

Right out of the box, the Intermountain model is, or builds into, a nice representation of the post-war rebuilds (although there are some issues such as the brake arrangement). However, my goal was to build a 1927-28 design as it would have appeared during WWII. When I took my calipers to the IM model, I did make an interesting discovery. It turns out that their model is 10′-9″ to the eaves, about 2″ off of the measurement on the FGE drawings. For those using this car, that's really no big deal, as car height could vary 2″ depending on load… although you might want to model the IM reefer with compressed truck springs to model a fully loaded car!

Since the body is only 2″ too tall, the first thing I did was remove 2 scale inches from the top of the body to lower it to the correct height. I kept my calipers handy while sanding and tried to make sure I remove material evenly. When sanding projects like this it is useful to move in a figure 8 pattern and to reverse the work fairly often in order to sand evenly. It took about 10 minutes to get the correct amount of material removed.

Once the height of the sides was correct, I removed the riveted plates on the side sills that represent the internal steel frame that was added later. Using a sharp blade, I scored the side at the top edge of the plate, where it meets the side sheathing. Then, using a chisel blade, I carefully removed the raised area and the rivets. I left the rest of the rivets on the side sill alone. A quick sanding with a sanding stick (carefully avoiding the remaining rivets) smoothed the area.

Next, I flipped the car over and removed the mounting lugs for the reservoir and the AB valve, as these are not located correctly, at least based on photos that I have seen. I mounted the center sill and trainline according to the directions.

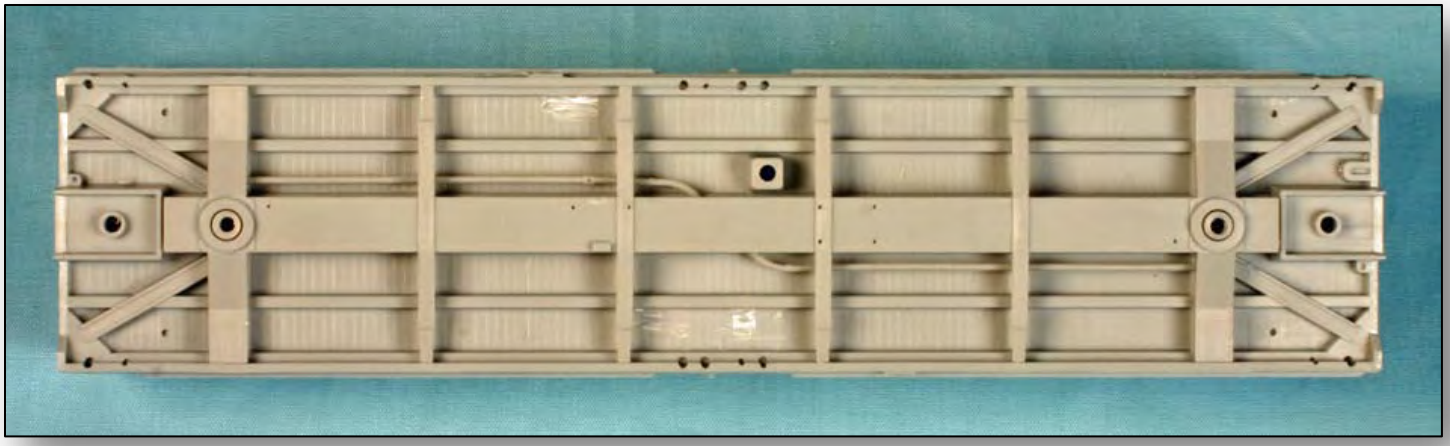
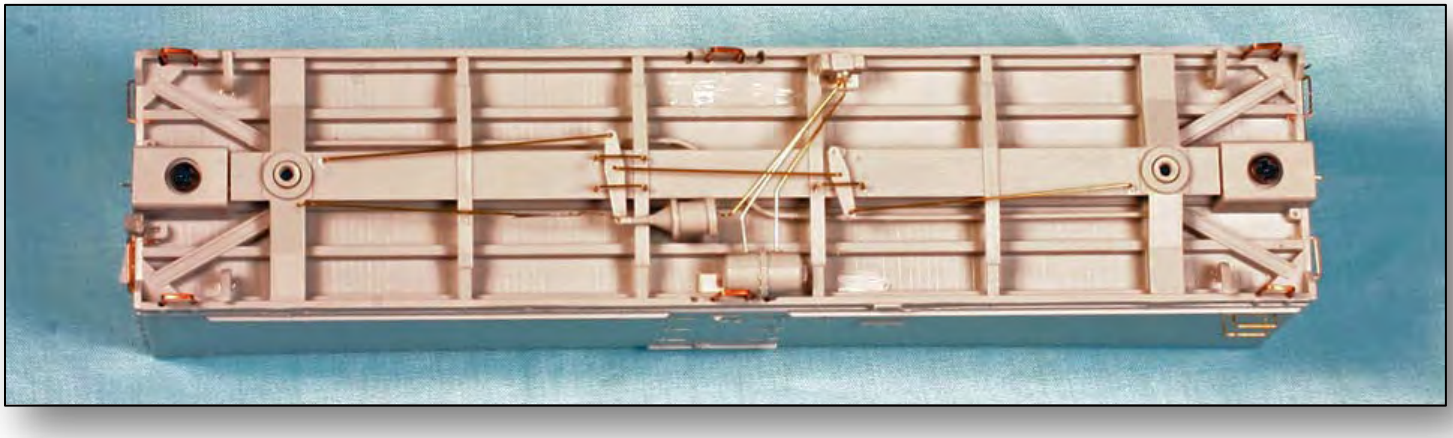


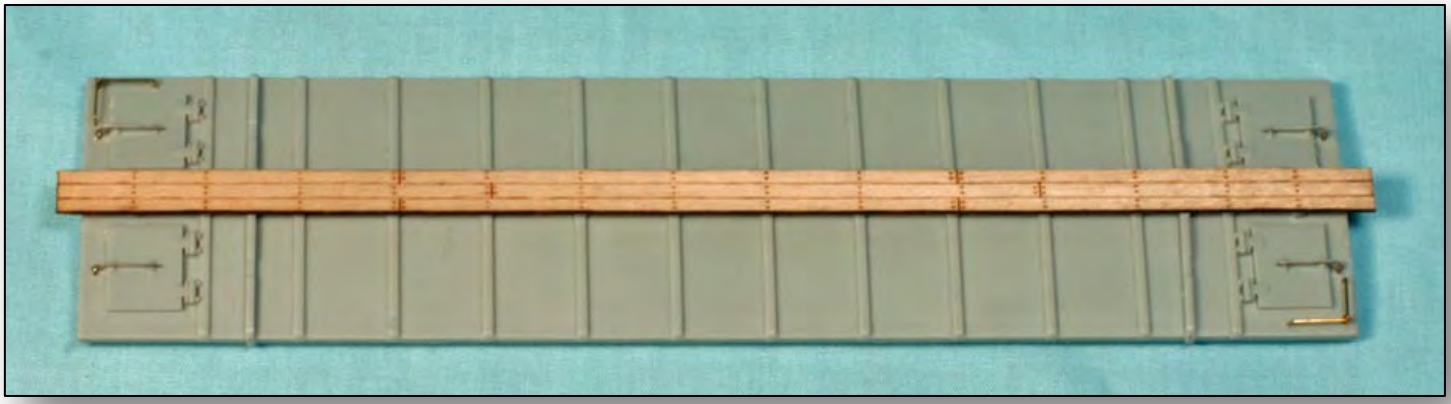
Photo of the bottom of the kit showing the underbody with the reservoir and AB valve mounting lugs removed and the air line, center sill and bolsters in place

I cut some supports for the AB valve and reservoir from 0.100" x 0.060" styrene that were just a bit longer than the pieces. I glued the reservoir support on the same side as the cylinder against the next cross-tie. I glued the AB valve support on the opposite side of the car, and on the opposite side of the cross-tie. The AB valve support should be against the side of the car and the reservoir support should be slightly to the center from the side to allow the reservoir and side step to fit. Note that you could also make these supports out of strip brass, bent to shape. I mounted the cylinder and I drilled holes to mount the valve and reservoir and glued them in place. I installed the grab irons that are the brake lever hangers on the center sill and mounted the brake levers as shown in the directions, using the rods between the brake lever and the truck to get the spacing correct. Once the glue was dry, I bent two lines of 0.012" brass wire to fit between the valve and the reservoir and another between the valve and cylinder. These should all be bent so that they lie flat on the center sill. Once these were in place I fitted the center brake rod over them, between the two levers. I also added a brake chain (etched metal from Burl Rice, http://burlrice.com/Chains/index.php). To make the chain fit between the lever and the bolster, I soldered a length of 0.012" brass wire onto it. I added Detail Associates sill steps (type A). You don't even need to drill for these – the holes that are there are a perfect fit! Finally, I glued the drains in position. I also put the coupler box lids in place and screwed on the trucks to protect the underbody.

On the roof, I added the "L"-shaped wire grab irons to the ends, and I used the metal hatch covers. Intermountain supplies small "U" shaped wires that need to be carefully inserted through the latches and then mounted on top of the hatches. After the ACC dried, I went back and made sure that the pins did not interfere with mounting the roof. I also added the hatch rests, being careful with these delicate parts! Finally, I added the wood running board, carefully using ACC to secure it to the roof. I carefully added the running board end braces, gluing them to the wood running board with ACC and the car end valence with solvent cement.

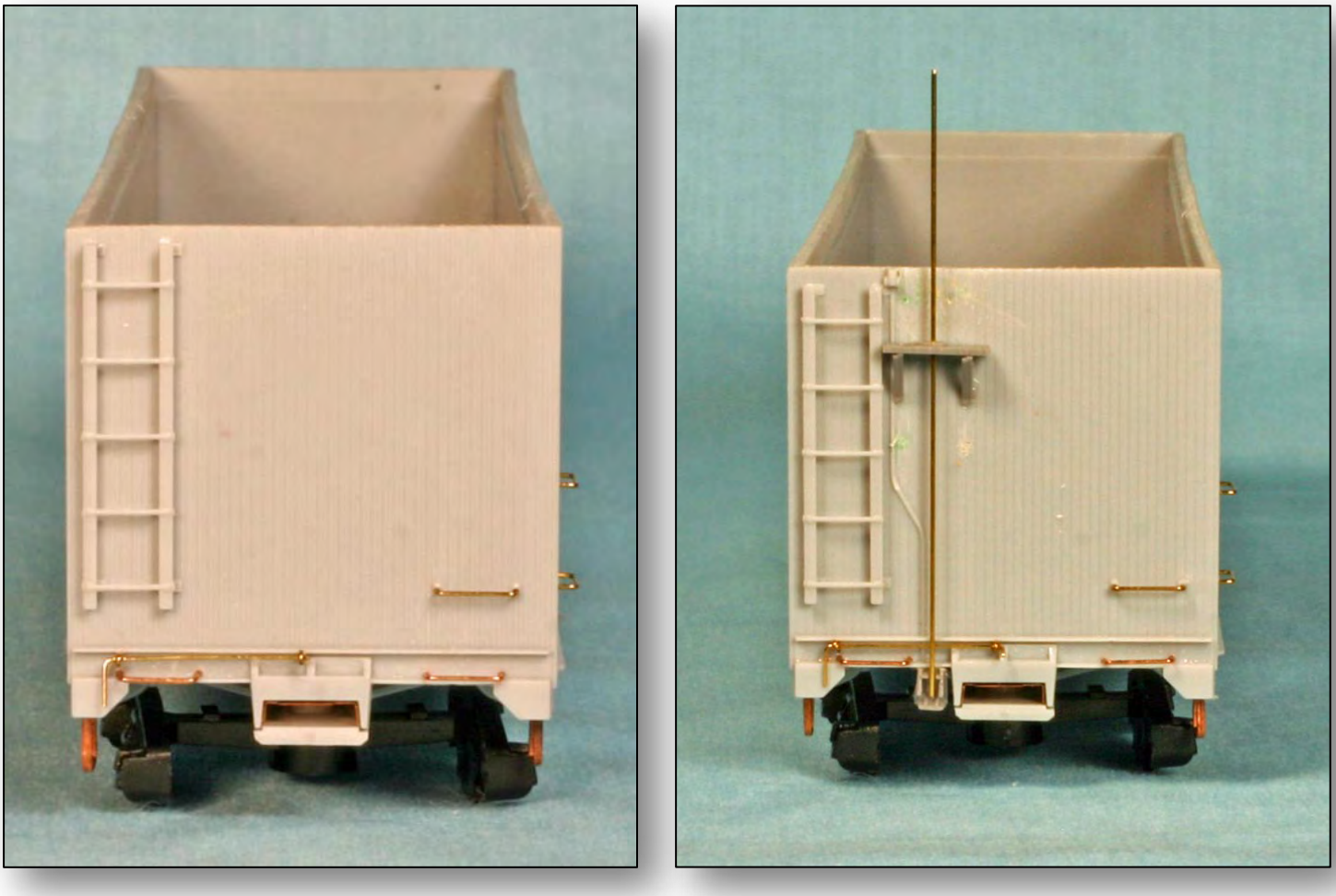


The completed underbody showing the revised locations of the brake gear and other details.



Completed roof assembly showing the hatches, running boards, grab irons, etc…

Following completion of the roof, I went to work on the sides and ends. All I added to the sides before painting were the grab irons. The ladders and door latches were set aside as they need to be painted black before being added to the painted sides. I added the end grabs that were predrilled, and then realized that there should be two grabs on the end sill on each end. I drilled holes for these and added grabs. I also added the uncoupling levers from the kit. On the B-end, I wanted a vertical shaft handbrake, so I plugged the holes for the brake platform and then glued the Tichy platform supports in place with the bottom peg of these in the top hole. I removed the top of a Tichy sill mount for the brake and glued what remained to the bottom of the sill. I used a piece of 0.015" brass wire for the shaft and the brake wheel from the Tichy set. Finally, I added the ladders to the ends, since they will be painted the same color as the end and I added 1.5 oz of weight, using self-adhesive A-line weights.



The A and B end of the car are detailed with grab irons, uncoupling levers, hand brake and other details.

With the model complete, I grit blasted it and carefully washed it in soap and water. When it was completely dry, I painted the components of the model. The sides were painted with a 1:1 mix of Poly Scale Buff and Signal Yellow. When these were dry, they were masked and the roof walk was stained grey with a mix of black leather dye and alcohol. When the roof walk was dry, the roof and ends were painted with Poly Scale Mineral Red. The underbody, trucks, side ladders and door latches were painted with Poly Scale Steam Loco Black. The side grab irons were also painted black using a very fine paintbrush. When the paint was dry, the car was given a coat of Future (an acrylic floor finish). I used the Speedwitch FGE decal set, which is designed for the modified car (Speedwitch has been out of production for several years but recently announced a return, hopefully indicating that these decals will be available again). Using this set involves some cutting and piecing to get the correct numbers for the cars in the original number series. Once the decals were dry, I carefully cut along each scribing line in the siding and then applied additional decal setting solution. Once the decals were settled nicely on the model, the car was sprayed with ModelMaster flat to hide the decals. This particular car was lightly weathered, with an overspray of grimy black on the roof, a light spray of a tannish grunge on the sides, underbody and trucks, concentrating on getting more dirt low down and finally two stripes of "mud" on each end, that represent journal oil thrown onto the end by an adjacent car. Chalk mark decals and dry transfers were used to create these ever present marks on the sides of cars.

Completed car has been painted, lettered and weathered and is ready for service.

Modeling the Coal and Ash Hoists in Shamokin

By Chuck Cover – photos by the author unless noted

Completed hoists and hoist house in Shamokin on my layout.

Background

I am modeling the PRR's Shamokin Branch. One of the projects that was on my to-do list was to model the Shamokin Engine facility where there were two small hoists, one for coal, one for ash, as well as a small sand tower. These were located adjacent to the small, single track engine house. As luck would have it, the PRR-Pro group voted to build coaling facilities for its current project. This project has a broad scope, as modelers could model everything from large concrete coaling towers to very small facilities in which coal was loaded by hand. A few of the participants chose to model the small coal hoists that are basically a structural steel tower, 40-60 feet tall, having a hoist system to lift coal above train level and a chute to dump coal into the tender. Shamokin had a similar hoist that moved ash that had been emptied into a pit by the steam locomotives into hopper cars for transport. I chose to build both of these hoists as well as the hoist house that provided the power to operate them.

There are drawings available of several hoist manufacturers that are similar to those in Shamokin including Ogle Construction Co., Roberts and Schaefer Co. and Fairbanks, Morse & Co (some of these drawings are available on the PRR-Pro site). Although these are similar, none were an exact match to the Shamokin hoists. After studying numerous photographs of the two hoists, comparing the towers to locomotives, hopper cars and various structures, and discussing the dimensions with other participating modelers, I made drawings of what I thought was an accurate representation. Note: other modelers came up with slightly different measurements.

The towers are essentially the same, the only differences are that the coal tower has a corrugated roof and each has a different base. Both towers are six sections tall, each section is a cube with a 6′ x 6′ footprint and is 6′ high. The columns (verticals) that are chute side extend 6′ higher than the top section and secure the sheaves to raise and lower the chutes. The columns are 6″ angles and the struts (horizontals) and the diagonal braces are 3″ angles.

The hoists in Shamokin. *(Both photos, Owen Thorne Collection)*

There are two, three-foot wide, platforms, one at the top of the first section and the second at the top of the fifth section. The hoist bucket apparatus is pulled through the center of the tower on tracks via a cable and sheave system. The sheave located at the top of the sixth section is set diagonally so that the cable that pulls the bucket up through the center of the tower runs over the sheave to the back corner where the cable runs down the back of the tower (non-chute side) to another sheave at the top of the first section. From there the cable runs out to the hoist house that is located between the two towers. The bucket moves on

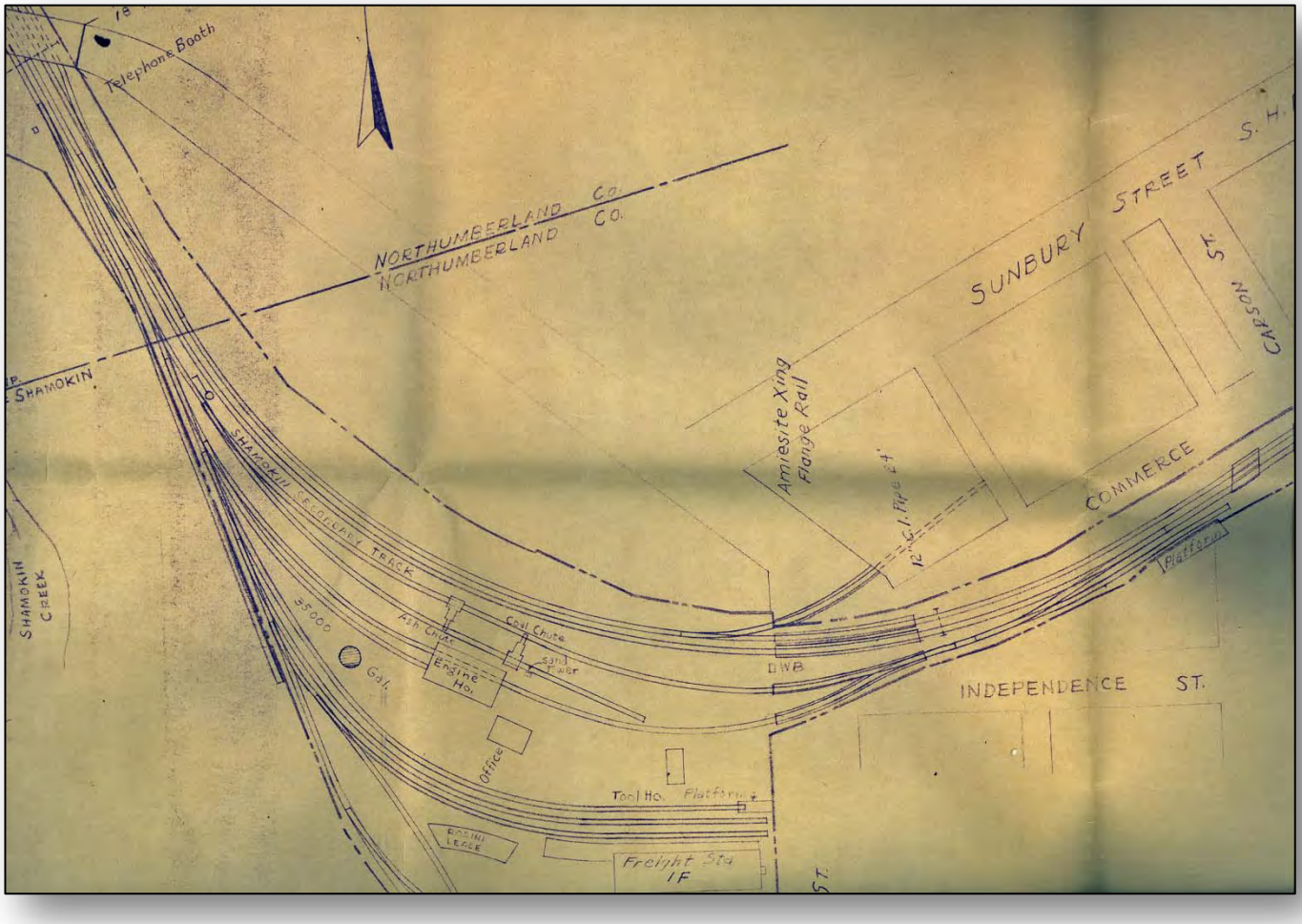
two vertical tracks up to the dump chute, which is located within the forth section.

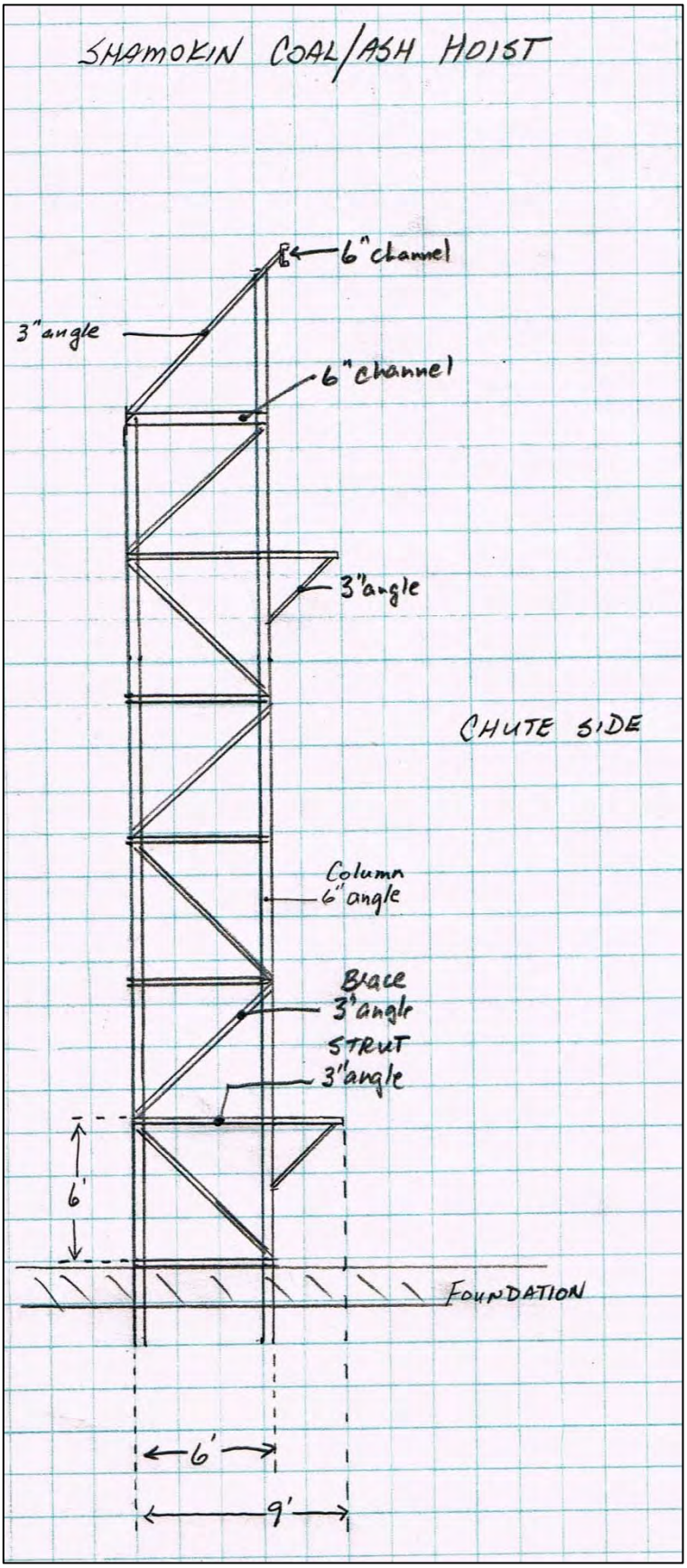
Each tower sits on a concrete foundation. The foundations for the ash and coal towers are a little different. There are thick cables that run from the back (non-chute side) of each tower to the foundation for an extra support/counterweight when the chute is lowered toward the service track.

The hoist house is a concrete structure, approximately 10′ wide (between tracks) x 12′ long (between towers) x 10′ high with a flat roof. There is a door on the ash hoist side, two windows on the engine service side, a large door on the coal hoist side and a blank wall on the service car side. The cables to run the hoists appear to run through openings in the doors. I think that there was probably a clutch that controlled which hoist was activated.

▲ Helper PAs units passing through Shamokin, heading back to Northumberland. *(Photo by Larry Keller)*

▼Track diagram of Shamokin.

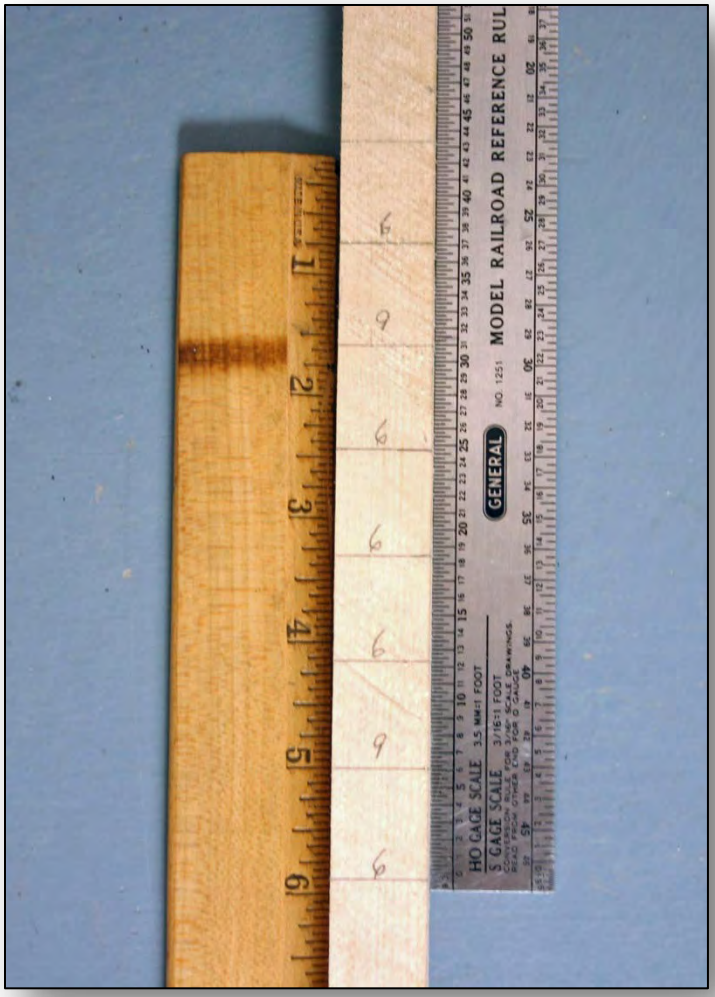




CONSTRUCTION

There was much discussion between the PRR-Pro participants as to what materials to use for the construction of the towers. Brass would probably give you the most realistic representation, however, I was hesitant to use it due to the difficulty in soldering all of the joints especially considering my skill set. Styrene would have been a good choice, however, I did not see any structural styrene that was the small size that I wanted to use for the struts and braces. I chose Northeastern Scale Lumber structural shapes, 1/16" angles (6 scale inch) for the columns and 1/32" angles (3 scale inch) for the struts and braces. In the photos, the struts at the top of the highest section appear to be channel rather than angle so use .06" styrene channel for these heavier struts. Both of the towers were modeled in the same way, the only difference being the foundation.

To begin construction, build a jig out of wood. Use a 9" long piece of 2" x 4", and with a table saw cut it down to a scale 5'-6" square (the outside dimension of the tower is 6 scale feet per side and each leg of the wood angles is 3" thick). Then shave 2 scale inches off of one side (back side) of the jig. Mark the jig at 6 scale foot horizontal intervals on the front and both sides of the jig. Remember that the chute side of the tower column is 6 feet higher than the rear column. Cut the columns a little longer than the height of the tower as the bottom of the column, below the bottom of the first section, should be long enough to fit into the base that you will construct. Cut the struts 6 scale feet long (four struts should be 9 scale feet long for the platforms). Using thin strips of masking tape, tape the columns along each side of the front of the jig and using ACC, cement each strut to the columns using the horizontal marks as a guide. Remember that the strut must be 9 scale feet long at the top of the first and fifth sections to support the platforms. Cut the braces a few feet longer than needed so that you have something to hold while you are gluing them in place. Then glue the braces between each strut using photos to assure that the braces are in the correct position. Cut off the excess length of the braces. Repeat this process for the second side of the tower making sure the platforms will be positioned in the same, chute side, direction. Be sure to have some acetone handy to dissolve the ACC should you want to adjust one of the struts or remove your fingers from the tower. During discussions with others who were building these types of hoists, there were some who thought about adding gusset plates to the structure. I decided not to go in that direction feeling that, for me, the extra detail was not necessary.



Gig for construction of hoist towers.

Hoist tower

Once both sides are finished, tape them to each side of the jig. You will have to shim the back sides of each with a 2 scale inch thick piece of styrene to get a tight fit and keep the sides from moving. Once the sides are in place, and lined up with the horizontal markings on the jig, glue the struts and braces in place for the front, chute side, of the tower. Remove the three sided tower from the jig by pulling out the shims, rotate the tower, tape it in place and finish it by gluing the struts and braces on the forth side. Again remove it from the jig by pulling out the shims and sliding the tower over the jig. One of my fears was that the tower would be very fragile, however with all of the bracing, it is actually reasonably strong. I have knocked it over several times when setting it up in the yard and it has stayed intact.

The next steps are to detail the towers using the photographs as a guide. Use Tichy coal chutes, platforms with railings and ladders secured with ACC. Use 1/32" angles as the diagonal supports for the platforms. The tracks for raising the buckets were glued to the inside of the towers using ACC. One track was simulated with .06" channel, the second, curved track, was simulated with .019" brass wire. The sheaves were Grandt Line N scale 60" diameter sheaves that are supported by .06" channels that span the struts on the top of the sixth and first sections. The bucket was not modeled; I decided that it would always be below ground and not seen on my layout. Build the inside portion of the chute using scrap styrene, basically just build a box and attach it to the back of the chute. The sheaves at the very top of the towers are for the chute, and are attached to the ends of .06" channel. The reinforcing cables/counterweights run from the back of the tower, connected to the highest strut down to the formed concrete foundation. Use .019 inch brass wire to simulate the cables and eye bolts attached to the struts. The roof on the coal hoist was built using Campbell Scale Models corrugated aluminum. Paint both towers flat black and weather.

Next build the concrete bases for the towers. Glue short pieces of 5/16" square tube to a base of .02" sheet styrene spaced so that the legs of the tower will fit into holes drilled in the tops of each tube. Use .08" sheet styrene cut to size as formed concrete around the sides and back (non-chute side) of the ash hoist. Use a double thickness of .08" sheet styrene at the back of the coal hoist. Apply grab irons on the sides of the foundations that will match up with the ladder locations. Paint the foundations concrete and weather.

Hoist tower with some details added.

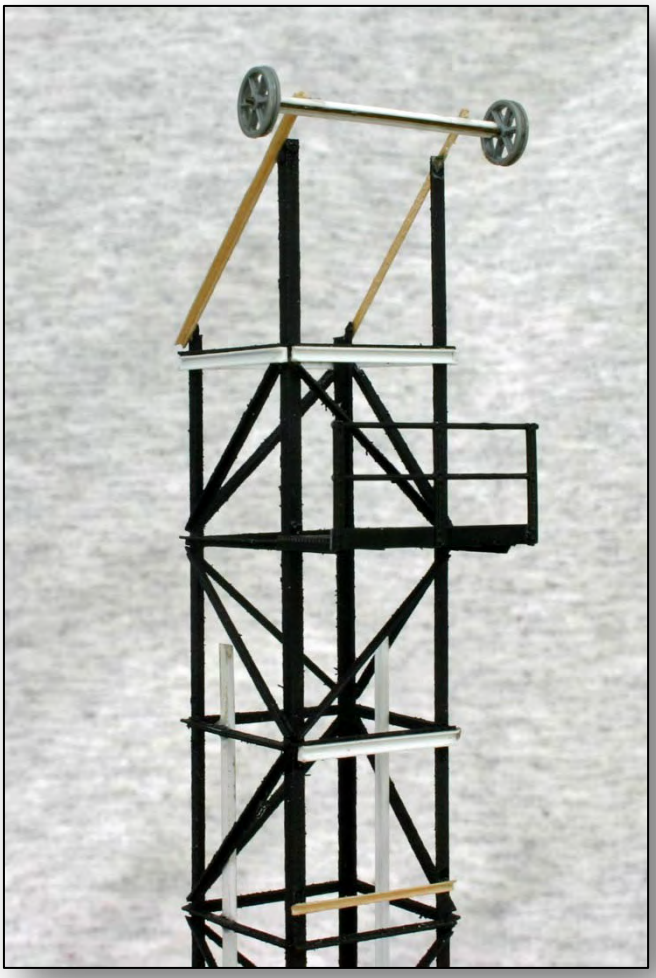
Details at top of tower. Note channels at top of highest section and at top of diagonals for chute sheaves.

The final steps are to run the cables that raise and lower the bucket and chute. Since the bucket is under ground, attach one end of some black thread to the center of the base at the bottom of the tower. Run it up to the top sheave, ACC it in place, then run it down the back of the tower to the lower sheave. Again ACC it in place and run it out the side of the tower toward the hoist house. The chute cables run from the chute, up over the chute sheaves and back down to the side of the high platform. Use small beads to simulate counterweights for the chute cables.

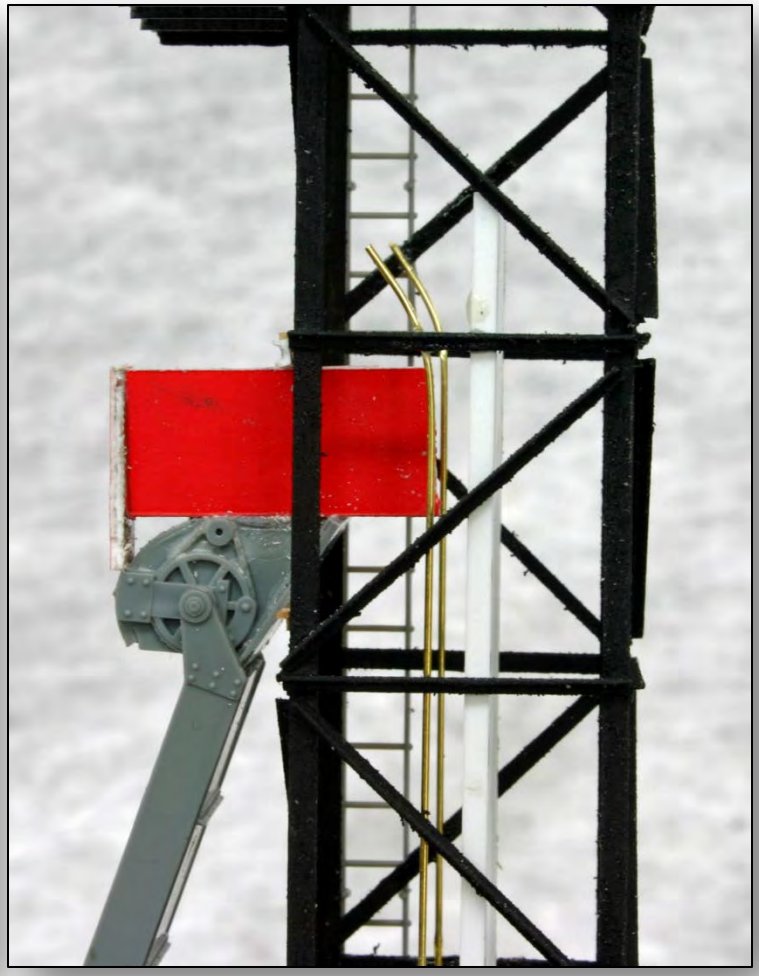
The hoist house was built from concrete block styrene sheet. I used scrap box windows and just put sheet styrene behind the two doors and painted them black. The roof is sheet styrene painted black. Weather the hoist house.

In Shamokin there was an engine service track as well as a track for the service cars (sand, ash, coal). To have enough room between tracks to locate the hoists, I had to move the tracks so that they were 28 scale feet apart at track centers. The towers were placed about 55 feet apart. A pit was constructed under each track at the location where the ash and coal would be dumped and a grate was scratch built using styrene rod and I-beams. The pit extends under each tower to simulate where the bucket would pick up the coal or ash that is to be lifted up the tower to the chute.

I enjoyed corresponding with other modelers participating in this PRR-Pro project. There were many good discussions that helped push me along. Now that the engine servicing facility is complete on my layout, a stop in Shamokin for the I1s locomotives rolling along the Branch will be a regular part of each operating session.



▲ Details of upper half of tower. Note supports for chute in forth section.



▲ Close-up of bucket tracks and chute.

▲ Photos of the coal hoist. Note the foundation.

▲ Photos of the ash hoist. Note the foundation.

Rear view of ash hoist.

Painted coal hoist.

Painted ash hoist.

◄ Close-up of coal hoist top of tower details. Note roof on top. ▲ Close-up ash hoist foundation.

Close-up of coal hoist foundation.

Hoist house, coal side.

Hoist house, ash side.

MATERIALS

Northeastern Scale Lumber
70501 ..... 1/16" angle
70499 ..... 1/32" angle

Evergreen Scale Models
218 ..... .02" rod
261 ..... .06" channel
275 ..... .156" I beam
9020 ..... .02" sheet styrene
9040 ..... .04" sheet styrene
9060 ..... .06" sheet styrene
9080 ..... .08" sheet styrene

Plastruct
90624 ..... 5/16" square tube
91620 ..... Concrete Block sheet styrene

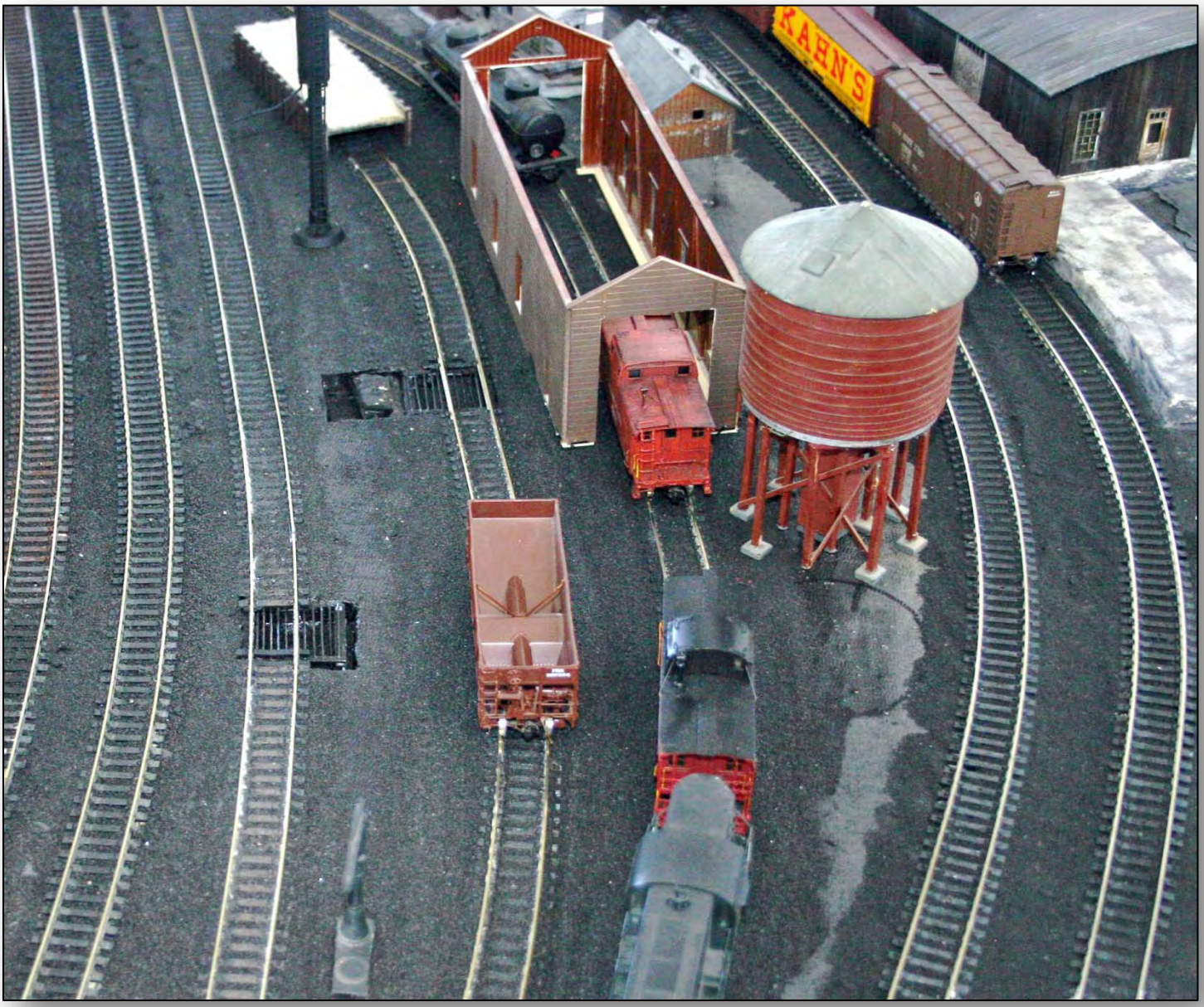
Tichy
3021 ..... 18" straight grab
8001 ..... Open Grate Platform and Handrails
8002 ..... Safety Cage Ladders and Staircase
8003 ..... Coal Chute

Grandt Line
8003 ..... N SCALE 60" diameter Sheave

Detail Associates
2206 ..... eye bolts
2506 ..... .019" brass wire

Hobby Lobby
Small glass beads
Black thread

Campbell Scale Models
803 ..... Corrugated Aluminum



Location of service tracks on layout.

Views of completed hoists and hoist house in Shamokin on my layout. The ash hoist is in the foreground.

More views of the completed hoists and hoist house.

Pennsy Merchandise and TrucTrain Trailers

Part 2 – 30' Scott Brothers and TrucTrain Single-Axle Trailers

By Curt LaRue – photos by the author unless noted

SCOTT BROTHERS 30′ STEEL LCL VAN TRAILER #397

A 30' LCL van being test loaded on F30D TrucTrain Flat Car. Note the heavy corner posts, bottom sill, and scuff bands designed to protect the trailer body in the tight confines of eastern cities. *(Curt LaRue collection)*

BACKGROUND

A great deal of the fun related to the hobby of modeling is the search for information. The search for information has led to some interesting and in some cases unsavory places. In the mid-eighties, I attended a Peterbilt training session in Philadelphia. I flew in and out. On the way out, I was in a window seat and shortly after takeoff something caught my eye. As we flew over a dump near the airport, I spotted a Pennsy trailer with diagonal "PENNSYLVANIA RAILROAD" lettering on its side. It was too late to do anything about it then, but I knew we would be back in the spring to attend the PRRT&HS Annual Meeting. When I got back home, I told Brady McGuire about my sighting and we agreed to try and find the trailer in the spring.

All went as planned and we departed Cincinnati for Philadelphia with two van loads of local members of the PRRT&HS eager to attend the Annual Meeting. When we arrived in the Philadelphia area, we followed the Main Line into the city taking photos along the way. We angled our way out toward the airport to find the dump with the PRR trailer. There was an industrial park on the way in and we found some 35′ PRR trailers which we photographed and from which we took dimensions but not the trailer we were looking for. Finally, we found a road into the dump. The refuse was being burned, and it smelled awful.

We found a shack with a tough-looking dog chained to a doghouse and asked a scruffy-looking character if we could look at the trailers parked nearby. He agreed, and we found the trailer in the line-up, but it was parked tightly alongside another trailer.

We had to settle for a photo of the nose. We were able to take dimensions of the trailer by crawling underneath to get at the other side. When we finished taking the dimensions of the trailer, we returned to the vans. The rest of the guys were coughing and wheezing, begging us to leave the site. Brady and I were just fine and were very excited about our "find".

Note the heavy duty construction of rear bumper area with recessed panel for lights, the rubber dock bumpers, and striped bumper/ step. This trailer has recessed rear door latch handles. Some of these trailers were built with exposed rear door latch bars and handles. *(Curt LaRue collection)*

When I got back, I prepared a drawing from my field dimensions.

The trailer was lettered for the PRR but had Scott Brothers name on the nose. Scott Brothers was a local drayage company which was controlled by the PRR and handled the delivery of LCL freight for the PRR. I knew that LCL trailers of this type had been used in TrucTrain service because I had photos of them being loaded on TrucTrain flat cars. I checked all my photos and magazine clippings for a trailer of this type with a legible number but couldn't find one. Without a trailer number, I was unable to determine how many of these trailers were assigned to TrucTrain service and what the assigned number series was.

Trailer Description

Length: .....30'
Width: .....8'
Nose: .....Rectangular
Sides: .....Corrugated steel with steel scuff bands
Side door:.....43" curb side
Rear doors: .....Swing type
Roof: .....Full length
Landing gear: .....Retractable with wheels
Rear axles: .....Single
Wheels: .....Cast spoke

MODEL CONSTRUCTION

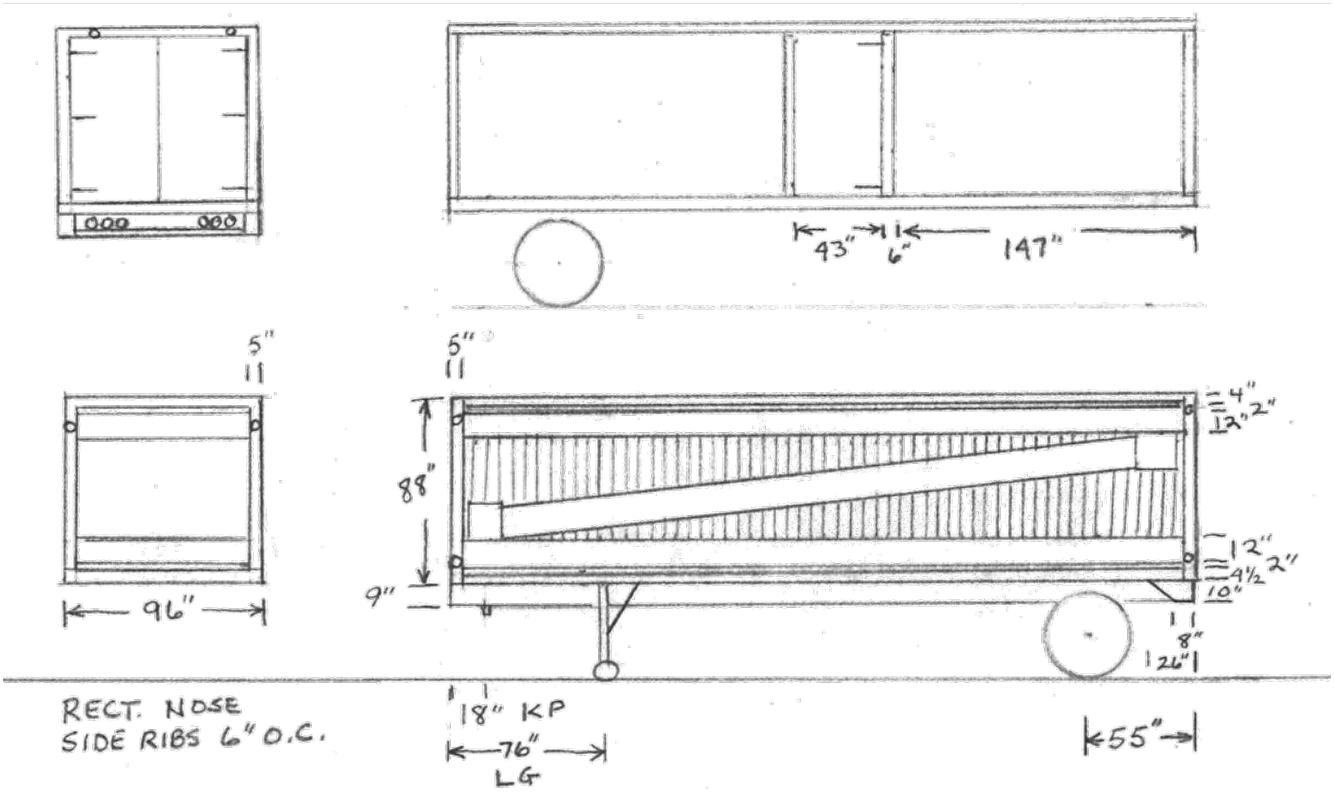
Driver Side – Cut out the side from Evergreen styrene #4527 Metal Siding .060" spacing x .040" thick. Cut out a piece measuring 28'-9" long x 6'-6" high. Cut out four corner posts from 4" x 4" styrene strip 6'-6" high. Cement one corner post at each end of the side so it is flush both top and bottom. Next cement a 4" x 4" strip lengthwise at both top and bottom overlapping each end slightly. When the cement is dry, trim off the overlapping strip to the exact length of the completed side over the corner posts. Note that the corner posts on the prototype measured 5" x 5" but I used 4" x 4" Evergreen styrene strips rather than custom cut 5" x 5" posts.

Thirty foot LCL trailer found in Philadelphia landfill. Note the barely visible Scott Brothers lettering. *(Curt LaRue collection)*

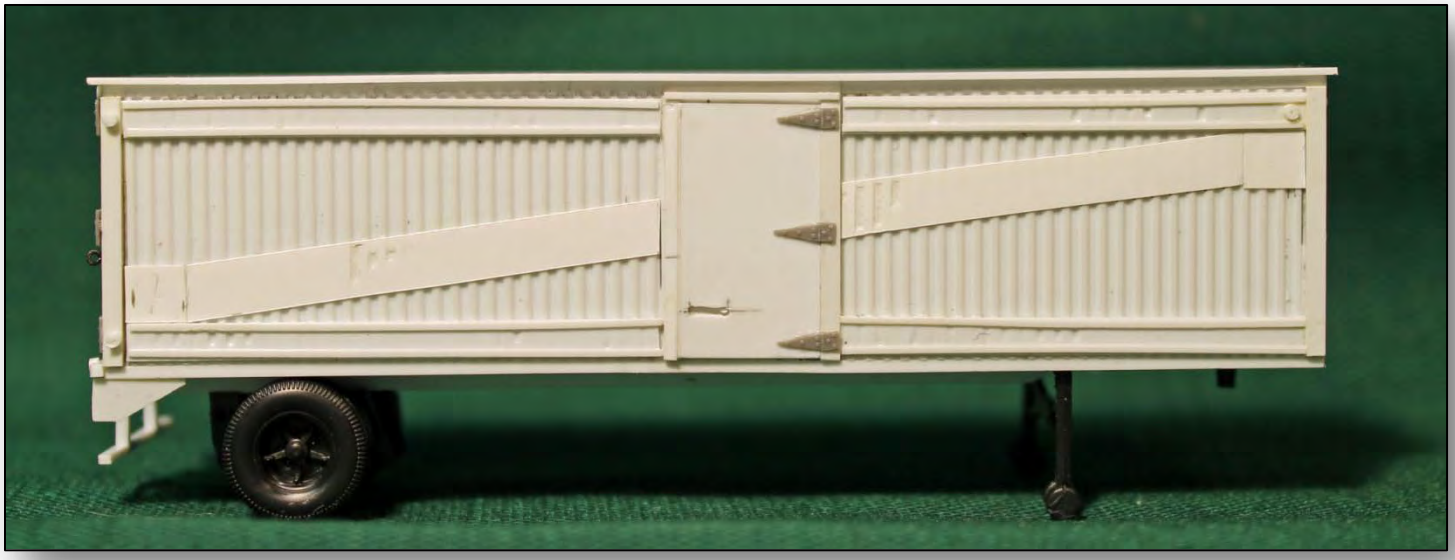
Curb side view of 30' LCL-type trailer in Lititz, Pa. The keystone and diagonal lettering panels are still on trailer. *(John Frantz)*

Three quarter view of nose and driver side of trailer showing scuff bands on nose of trailer. *(John Frantz)*

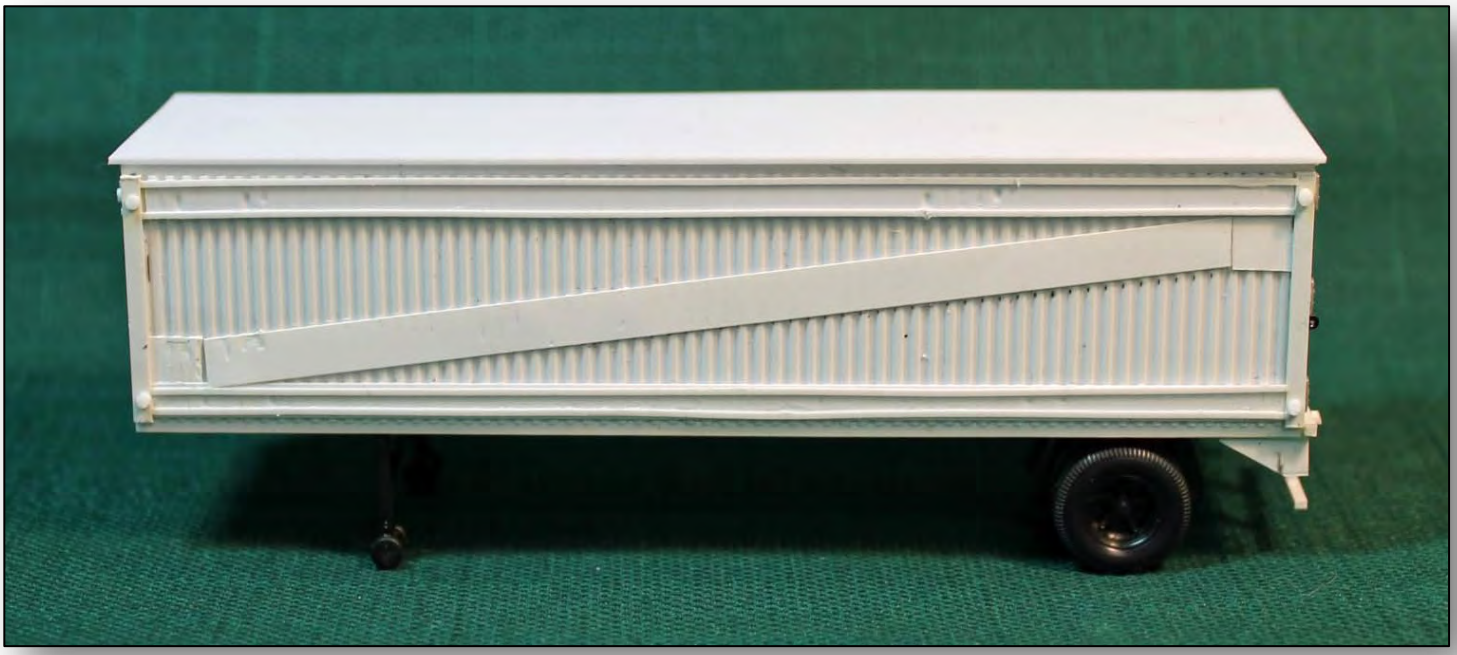
Three quarter view of rear and curb side of trailer. I believe that the rear door hinges and lights were later repairs made after taken from PRR service. Note the details of the rear bumper area with the recessed panel to protect rear lighting. *(John Frantz)*



Scott Brothers trailer plan. *(Drawn by Curt LaRue)*



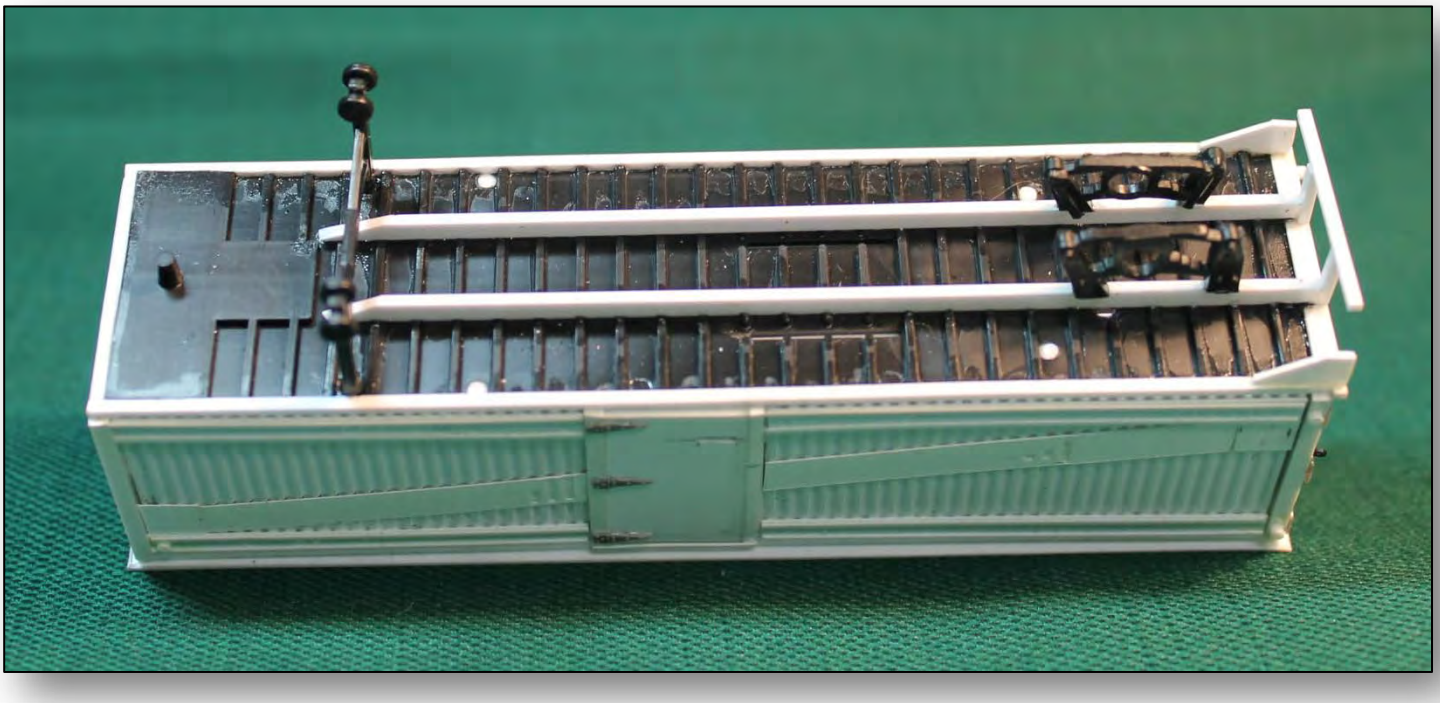
▲ Curb-side view showing keystone and diagonal lettering panels, side scuff bands, recessed door latch, door hinges, and heavy duty corner posts.
▼ Driver-side view. Note that a rear step bumper is in place. This was changed when better information and photos became available.



Curb Side – Cut a piece of #4527 Corrugated Siding 11′-3″ long x 6′-6″ high. Next cement a 6′-6″ long piece of 4″ x 4″ styrene strip in place at both ends end of the 11′-3″ siding. Cut a piece of styrene 3′-7″ x 6′-6″ to use for the door opening. I used a scrap piece of the siding smooth side out for this. For the rear of the door frame, cement a 6′-6″ long piece of 4″ x 4″ styrene strip at the trailing end of the door opening. Finally, cut a piece of siding 13′-3″ long x 6′-6″ high for the rear section of the side and cement in place. To complete the side, cement a 6′-6″ piece of 4″ x 4″ styrene strip long to the end of the side as a corner post and cement 4″ x 4″ styrene strips in place lengthwise at the top and bottom of the side as on the driver side.

Nose – Cut out a piece of #4527 Corrugated siding 7′ wide x 6′-6″ high. Cement a 4″ x 4″ styrene strip in place at the top and bottom and flush with the sides.

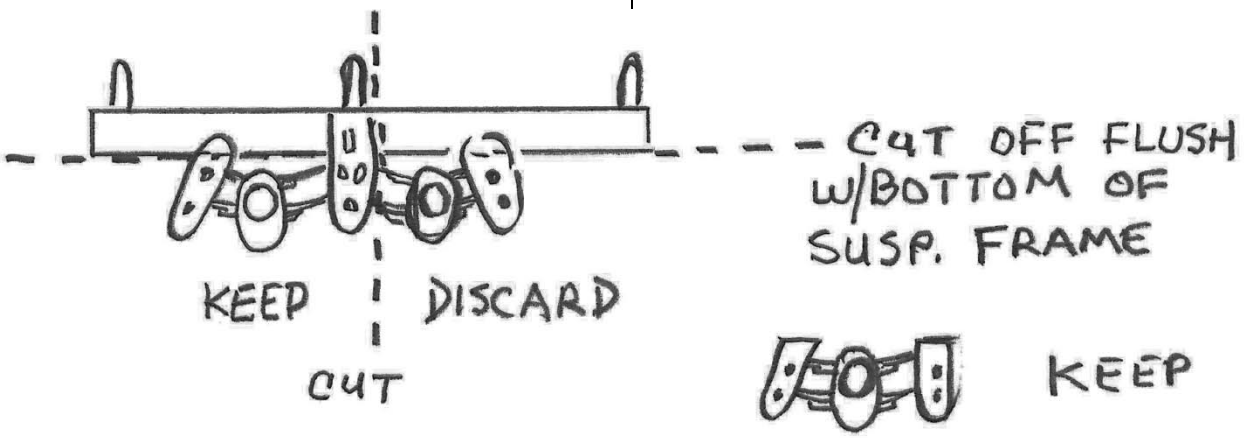
Rear – Use a piece #4527 siding 7′ wide x 6′-6″ with the smooth side out. Cement pieces of 4″ x 4″ styrene 7′ long to the top and bottom of the rear. Cement the sides, front, and rear of the trailer shell together making sure that everything is square. Finally cement pieces of 1/8″ x 1/8″ styrene strip 5′ long in place on the inside of the body with the strip flush at the top of the trailer body to strengthen the corners. This will leave a space inside the bottom of the body for the chassis to fit into.



View of chassis configuration with longitudinal frame rails added. Note that the frame rails extend all the way to the end of the trailer body. Also note mounting positions of landing gear and rear suspension.

Chassis – Use the underframe of an Athearn #5100 series 40′ Van Trailer. Make a crosswise cut 1′-9″ from the nose of the underframe to get an 18″ king pin setting from the nose of the trailer. Make another crosswise cut 29′-2″ from the nose for the frame to fit inside the trailer body. Narrow the underframe by 1/32″ lengthwise with an Xacto® knife and straight edge. Unfortunately the frame is arched from front to rear. To flatten out the frame, cement two 100″ x .100″ styrene strips in place longitudinally on the top side. Hold the strips in place with spring squeeze type clothes pins until dry. Next cut two 23′-9″ pieces from 4″ x 8″strip styrene to simulate the frame long beams. Taper the front edge of the frame rails from 0″ to 24″. Cement both frame long beams in place lengthwise 2′ from the outside edge of the underframe. This should put both frame rails spaced 34″ apart. The ends of the longitudinal frame rails should be flush with the end of the trailer body. Use the landing gear from the Athearn 5100 Series 40′ Van Trailer kit. Remove the top horizontal crossbrace and drill holes in the frame at 76″ to accept the landing gear locating pins and cement in place. Add a landing gear crank handle fabricated from wire and cement in place on the upper right hand side landing gear leg.

I don't believe that the Athearn 5100 series is currently available from Athearn but they are readily available at model railroad flea markets. I recently bought eight of them at one and that is enough for sixteen trailers. I like using the Athearn models because the frame is easily cut, the landing gear is usable, the suspension can be used as is for tandems or easily modified for single axles, and it comes with cast-spoke Dayton wheels.



Single-axle suspension from Athearn tandem suspension piece. *(Drawn by Curt LaRue)*

To fabricate single axle suspension, cut the Athearn 5100 series tandem axle suspension in half leaving a suspension mounting bracket at both ends of the spring. Cut the frame off the suspension and cement the rear suspension in place on the longitudinal frame rail centered in place and 55″ from the rear of the trailer body (see drawing on page 27).

DETAILING THE BODY

Curb side Door – Cut out a door 3′-7″ x 6′-3″ from .010″ plain styrene. To make a recessed door latch drill two holes with a no.61 drill 1 scale foot apart and 2 scale inches from the rear door edge and up 15″ from the bottom of the door. Connect the two drill holes with a hobby knife at the top and bottom of the holes. Cement the door in place with the leading edge of door tight against the 6″ x 6″ front door frame. Next cement a 2″ x 6″ piece of 6′-6″ styrene strip over the 4′ x 4″ rear door underlayment and tight against the trailing edge of the door. Create a drip strip at the top of the door 4′-6″ long from 1″ x 2″ styrene strip and cement in place at the top of the door. Trim the "ears" off three #3067 Tichy Triangular Door Hinges and cement in place with one at the top, one at the bottom, and one centered between. To finish the door, cement a .010″ piece of styrene rod or wire in place in the recessed door latch opening.

Scuff Bands – An interesting feature of this trailer is the exterior scuff bands designed to protect the trailer body from damage in the tight clearances of eastern cities. This trailer has scuff bands at the top and bottom of both sides and the nose. Fabricate scuff bands from .005″ styrene by cutting out 12″ wide strips. Cement in place on sides and nose per drawing and pictures. Note that the scuff bands are not flush with the top or bottom of the sides and nose. Leave about 2″ between the scuff band and the top and bottom of the trailer body. Create the corrugations in the scuff bands by cementing 1″ x 2″ styrene strips at the top and bottom of the scuff bands.

Side Panels – Make four 17″ x 17″ keystone panels from .005″ styrene sheet and cement them in place per the drawing and photos. Make the diagonal "PENNSYLVANIA RAILROAD" letterboard panels from .005″ styrene 16″ wide and cut to size to fit diagonally between the keystone panels per the drawing and photos. Use the styrene cement sparingly as it will dissolve the .005″ styrene very easily (take my word on this).

Roof – Lay trailer body top down on a sheet of .040″ plain styrene and trace roof outline leaving about 1″ for roof overhang over trailer body. Cement the roof in place.

Rear Door Assembly – The rear door opening should be 7′ wide. Scribe a vertical line halfway across at 3′-6″ to represent the joint between the rear doors. Cement Tichy #3067 Triangular Hinges per the drawing at 6″ from the top and bottom and one centered between the two. Cut a piece of 4″ x 4″ styrene strip 8′ long and cement in place full width at the bottom of the rear door assembly. Trim one #5167 Grandt Line Standard Gauge Reefer Car Door Latch Bar to correct height to represent the vertical door latch bar. The latch bar should be cemented on the right hand rear door with the latch bar handle extending onto the left hand rear door. Drill two holes just below the center door hinges to accept the mounting pins for Tichy # 3037 eyebolts and cement in place.

Rear Lower Side Gussets – Make two trapezoidal gussets from .010″ styrene 26″ long at the top, 8″ long at the bottom, and 10″ high per the drawing. Cement in place.

Rear Bumper – Make two bumper bolsters from .080″ styrene strip 8″ wide x 10″ high. Cement these in place on the inside of the rear lower side gussets and flush with the end of the sides. Next cut a piece of .010″ x .080″ styrene strip to fit horizontally between the two rear bumper bolsters. Cement in place recessed in about 4″. I suggest that you study Photo #2. To make the bumper cut a strip of 4″ x 4″ styrene to fit between the two bumper bolsters at the bottom and flush with the bottom of the bolsters.

Rubber Bumper Pads – After the model has been painted, cut two 2″ x 8″ styrene strips 10″ long. Slightly round the corners with 400 grit sandpaper. Paint grimy black and cement in place over the end of the bumper bolsters. See photo #2 for bumper pad shape and placement.

Marker and Stop Lights – For the marker lights I cut very thin slices of. 040 styrene rod and cemented them in place at each of the four corners on the sides, upper corners on the front, and at the rear near the roof line. After the trailer was painted, I dipped the end of a piece of .040″ rod into a puddle of gloss orange and touched the rod tip to the marker light bezels making a perfectly round "lens". For stop lights, I cemented three of the .040″ styrene slices on each side of the recessed area between the bumper and the rear threshold. See the prototype photo for placement. After the body was painted, I touched the end of a .040″ styrene rod dipped in Testors Tail Light Red to the inside light, silver to the center light, and orange to the outer light in each three light grouping guessing that the lights were for turn signals (outer), backup (center), and stop (inside).

▼ Curb side of finished trailer. ▼ Driver side of finished trailer.

◄ Nose and rear of finished trailer.

Painting and Lettering – The body of the trailer was painted bright red. From photos it looks like the wheels were painted bright red and not the yellow of the shorter LCL trailers. First paint the entire model with primer. The model was assembled from different colors of plastic parts. The primer will help create a more even application of the color coats. I painted the body, wheels, and landing gear Floquil Caboose Red. It is difficult to determine the color of the chassis. It could have been

painted red or black. Being uncertain, I painted the chassis black. I used the Bethlehem Car Works Trailer Decal Set #13 to letter the trailer. This decal set is no longer available, but Mount Vernon Car Shops is working on a TrucTrain decal set. Apply the keystones on the keystone panels and the "PENNSYLVANIA RAILROAD" lettering diagonally on the diagonal lettering panels. A keystone should be applied to the nose of the trailer and on each of the rear doors. I have no clear photos of the numbering placement of the numbers for these trailers, but I believe that it was placed on the front of the roof cap. Because I didn't have a clear photo of the numbering placement, I did not put any numbers on this trailer.

Retraining Chains – To finish the model, I installed A-Line 40-link per inch chain in the chain restraining eyelets. There should be a slight droop in the chain.

30′ TrucTrain Single Axle Van Trailer

Fruehauf PRR trailer #30C337 is one of the first 150 single axle trailers leased for TrucTrain service. *(Craig T. Bossler collection)*

Trailer 30E34 is unusual. It has smooth Keystone and diagonal lettering panels fixed to the ribbed sides. Most of the trailers of this group did not have these panels. *(Paul Dunn photo; Chuck Blardone collection)*

Side profile photo showing side details and lettering arrangement for trailer number 30C330. Note that trailer number is located near the top of side door. *(Andrew J. Hart collection)*

BACKGROUND

According to *The Keystone* article (Vol. 25, No.3, Autumn, 1992 by Mike Nesladek), the PRR leased 150 single-axle 30′ van trailers. The trailers were manufactured by Fruehauf around 1954. These trailers differed from the 30′ LCL trailer in the first part of this installment in several significant ways. The construction of the trailer was more modern in appearance. This trailer did not have the extra heavy corner posts, side sills, and scuff bands of the LCL type trailer. The side ribs were spaced farther apart at approximately 8″ on center compared to the 6″ on center corrugations of the LCL trailers. Most of the photos of this type of trailer show the trailer with the diagonal lettering "PENNSYLVANIA RAILROAD" applied directly to the side of the trailer with the letters spaced between the side ribs as compared to a smooth diagonal lettering panel applied over the side corrugations on the LCL trailers. As usual, there are exceptions. At the top of page 35 in the *Keystone* article, trailer #30E34 has separate smooth keystone and diagonal lettering panels applied over the side ribs.

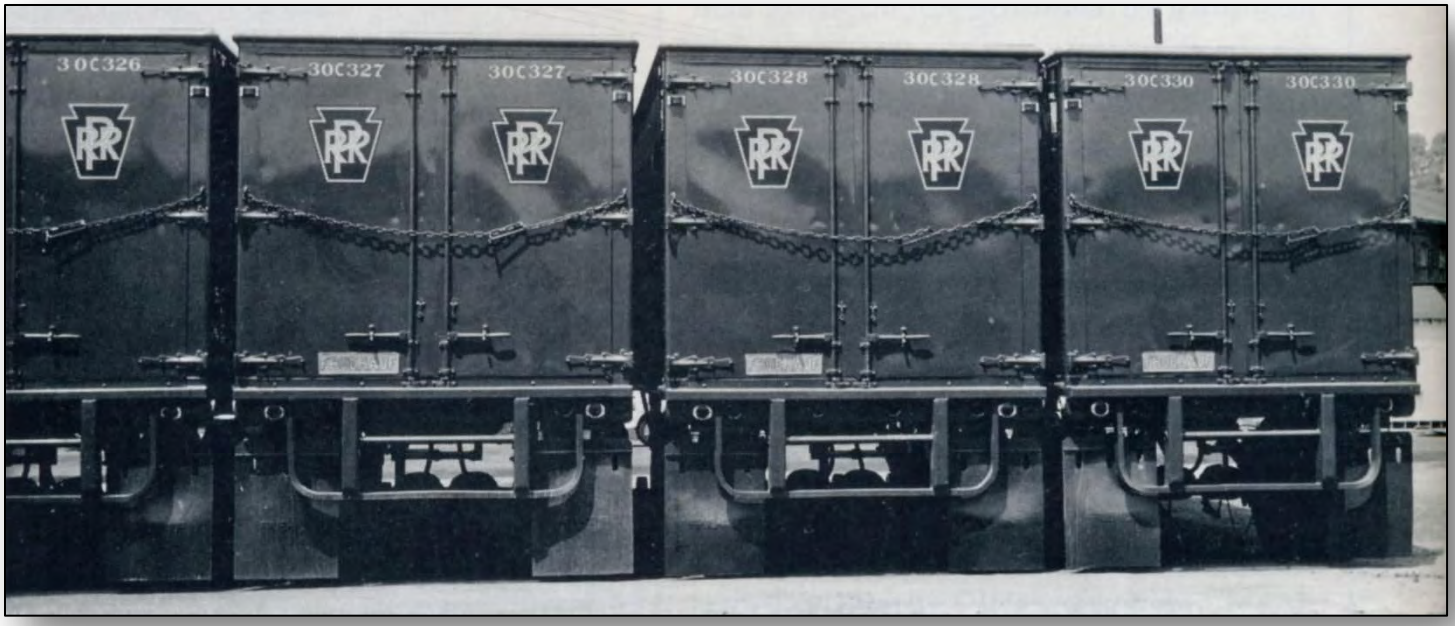
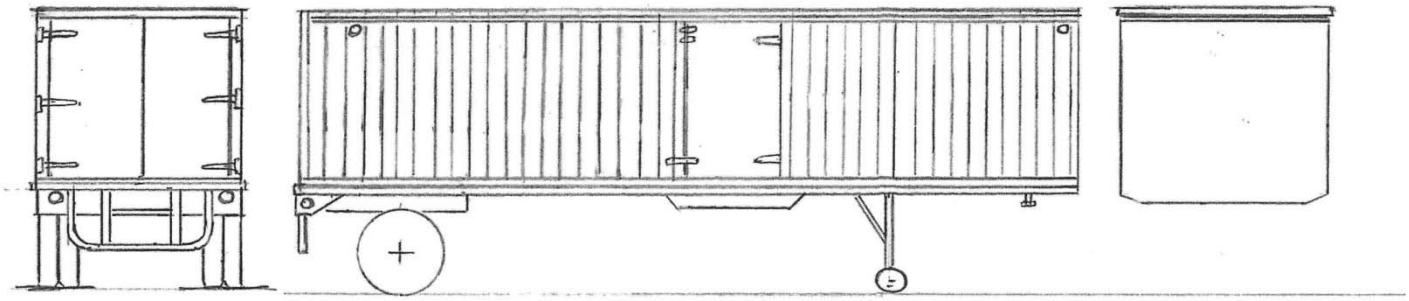


Photo shows lettering arrangement on the rear doors of trailer, hinge placement, dual rear door bar latch installation, and rear bumper. *(Andrew J. Hart collection)*



Plan for 30' single axle rib-side trailer. *(Drawing by Curt LaRue)*

I have not been fortunate enough to see one of these trailers so I had to prepare my drawing using photos and known dimensions as a guide. Again the *Keystone* article was very helpful. The photo at the top of page 40 is a broadside photo of the curb side. I copied and reduced the trailer picture to HO scale and used the reduced picture as a guide to prepare my drawing. I am sure that the resulting drawing is not perfect but is good enough to help build a model.

Trailer Description:

Length:	30 feet
Width:	8 feet
Nose:	Square
Sides:	Ribs 8" on center
Side door:	Curb side
Rear doors:	Swing type
Roof:	Full length closed roof
Landing gear:	Retractable with wheels
Wheels:	Cast spoke

MODEL CONSTRUCTION

Trailer Body – The side ribs on this trailer are spaced a little wider at 8″on center than the 6″ on center of the 30′ LCL trailers. I used Pikestuff Board and Batten or Metal Siding #541-1014 for the sides. I am not certain that the side ribs are individual posts or if the side is corrugated.

Left Hand Driver Side – Cut a piece of the Pikestuff siding 29′-3″ long x 6′-3″ wide. The front of the panel should have a vertical "post" rather than a space.

Curb Side – The siding will be cut in two pieces. Cut the front piece from the Pikestuff siding 11′ long x 6′-3″ high again with a rib at the front. Cut the rear panel from the same siding 14′-3″ long x 6′-3″ high per the drawing.

Door Span Spacer – Cut a spacer from .020″ styrene 5′-3″ wide x 6′-3″ wide. Cement the spacer in place between the front and rear side panels.

Door Frame – Frame the doorway on the sides and top with 2″ x 4″ strip styrene.

Door – Cut the door out from .010″ styrene 4′ wide x 5′-9″ high and cement in place inside the door frame.

▲ Curb-side view of unpainted model showing location of side door hardware. ▼ Driver side view of unpainted model.

Rear view trailer showing location of rear door hinges and dual door bar latches, chain retainer eyelets, and details of rear step bumper. ►

Nose and End Spacer Blocks – Cut out from .040″ styrene 5′-9″ high x 7′ wide. Cement these in place at both ends of the sides making sure that they are square. Note that the top edges of the sides and spacer blocks should match up with each other and be flush at the top. Note the spacer blocks are there to provide strength and that the nose and rear door panels will be laid over them.

Nose Skin – cut out the nose skin per the drawing from .010″ styrene and scribe the two body panel seams as in the drawing. Cement the nose skin over the nose block.

Upper Side Roof Battens – Cement a 1″ x 3″ styrene strip along top edge of both sides of body full length and overlapping ends slightly. When dry, trim off the excess overlap flush with the end of the trailer body.

Lower Side Sill – Cement a 1″ x 6″ styrene strip along the lower edge of the body leaving a 6″ overhang at the end of the body. When dry, cement a 1″ x 2″ styrene strip centered on the 1″ x 6″ strip including the 6″ overhang at the rear.

Nose of trailer.

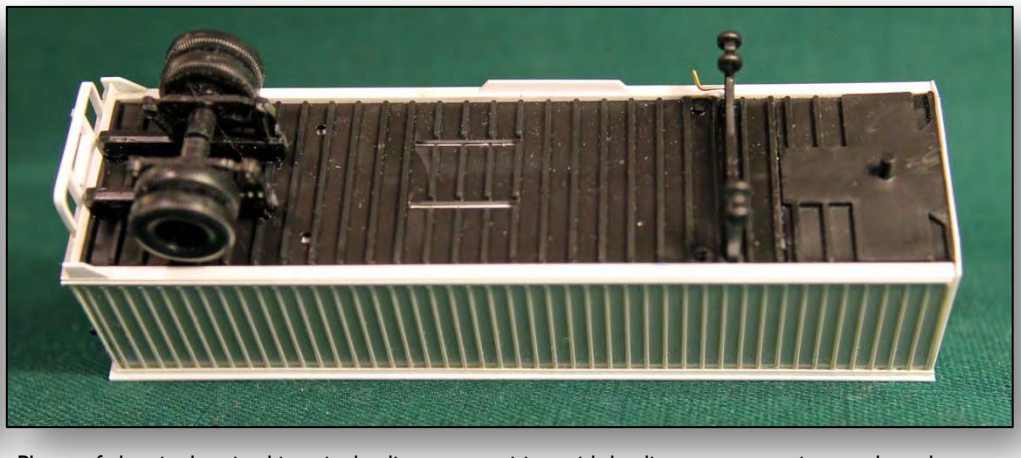


Photo of chassis showing king pin, landing gear position with landing gear retracting crank, and rear suspension.

Side Door Span Gusset – Cut a 1″ x 6″ strip to length and shape per the drawing and cement it in place beneath the side sill and curb side door.

Rear Threshold – Cut to length a 6″ x 6″ styrene strip to fit between the lower side sill extensions at the lower rear of the body and cement in place.

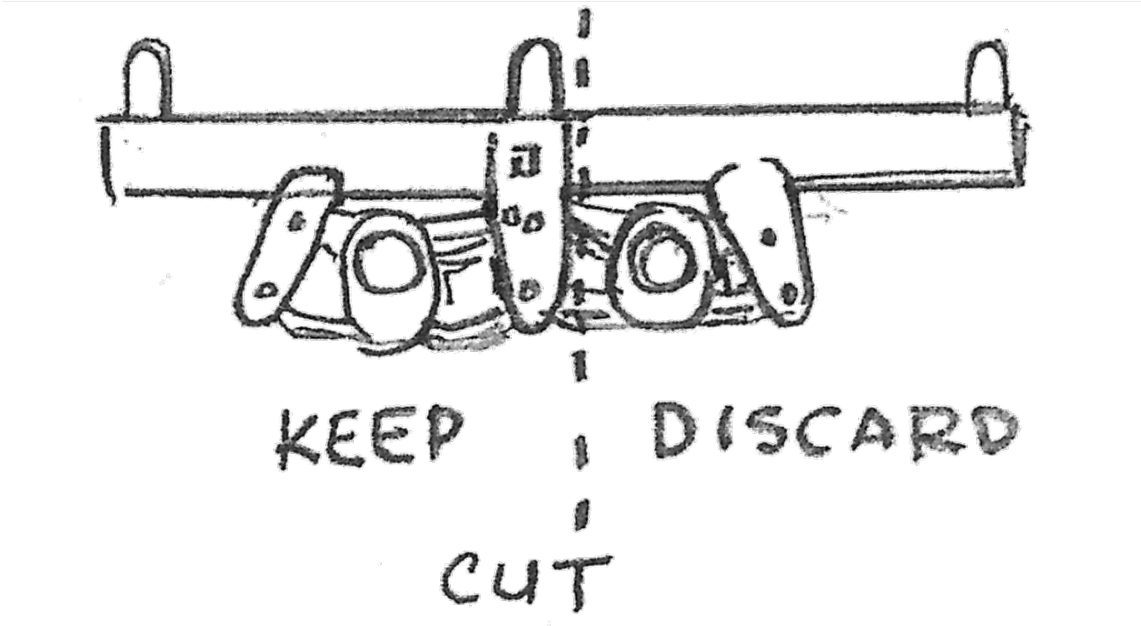
Rear Door Underlayment – Cut from .010″ styrene a piece 8′ wide x 6′-3″ high and cement in place on the rear of the body.

Rear Door Frame – Frame in rear door with 1″ x 3″ at the top and 1″ x 6″ styrene strip on the sides and cement in place on the rear door underlayment.

Rear Door Panels – cut out two rear door panels from .010″ styrene per the drawing and cement in place inside the rear door frame.

Roof – Lay body top down on a sheet of .020″ styrene. Trace the roof outline on styrene sheet with about 1″ of overhang of roof over body. Cut it out and cement it in place.

Chassis – Use the frame from an Athearn #5100 Series 40′ Van Trailer kit. Cut 2′ from the nose of the frame to get a 24″ king pin setting. Cut 6′ from the rear of the frame to get the correct axle spacing. Then cut 1′-3″ from center of frame for the frame to fit inside the trailer body. Cement the frame sections together and test fit in the trailer body. You may have to do a little filing for a snug fit. The frame will have a "bow" in it. To straighten it out, cement two ¼″ x ¼″ pieces longitudinally on the top side of the chassis. Be sure you place these strips so they don't interfere with the chassis to body fit. Hold the strips in place with two spring type clothes pins until cement is dry. Cement the chassis in place inside the trailer body with the upper coupler and cross bearers flush with the lower body side.



Single-axle suspension from Athearn tandem suspension piece. *(Drawn by Curt LaRue)*

Suspension – Cut the Athearn 5100 Series suspension in half per the drawing keeping single axle suspension with two spring hangers and the spring between them. Cement the rear suspension into the suspension holes.

Landing Gear – Mount the Athearn 5100 Series landing gear in place 7′ from the trailer nose.

Lower Rear Side Gussets – These gussets are located below the bottom sill of the trailer at the rear of the body. Cut these out of 1″ x 10″ styrene strip per the drawing. Cement them in place with the rear flush with the rear of the trailer body leaving a few inches of the threshold protruding beyond the gussets.

Threshold Crossbrace – Cut a strip of 1″ x 8″ styrene to fit between the lower rear side gussets. They should fit up snug against the rear of the suspension frame.

Rear Step Bumper – Cut two 4″ x 4″ styrene strips 2′-3″ long and cement vertically in place at the suspension extensions. Referring to the drawing, bend a 2″ x 4″ piece of styrene around a mandrel to create curved corners. I used the shaft of a micro screwdriver for the mandrel. Use the drawing as a pattern and cut the bumper to fit and cement in place with ACC. The ACC will grip and hold the bumper in place quickly.

DETAILING THE BODY

Curb side Door Hinges – Shorten Tichy #3068 strap hinges by trimming 6″ off the end of the strap. Cement in place per the drawing.

Curb-side Door Latch – Trim 6″ off the latch handle of Tichy #5167 Standard Reefer Door Latch Bar. Trim the vertical bar to length and cement in place.

Curb-side Door Chain Retainer Rings – Drill a hole to accept Tichy #3037 eyebolts halfway up the door frame at both the front and rear and cement in place.

Rear Door Latches – Trim 3″ off two Grandt Line #5167 Standard Reefer Door Latch Bars. Trim latch bars to length and cement both in place, one on each rear door per picture of the rear of trailer.

Rear Door Hinges – Trim 6″ off the ends of six Tichy #3068 Strap Hinges and cement in place on the rear doors per the drawing and pictures of the rear of the trailer.

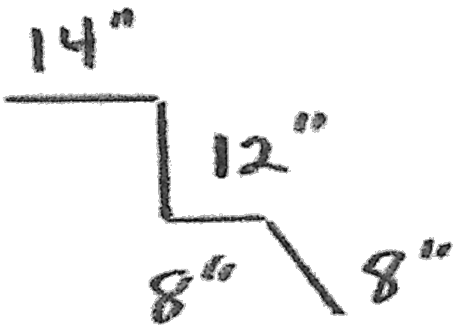
Rear Door Chain Retainers – Drill a hole about 3″ above the center door hinges in the door side frames to accept the mounting pin on Tichy #3037 Eyebolts and cement in place.

Optional Side Lettering Panels – After I had painted the model, I attempted to apply an old Bethlehem Car Works Decal Set #13. For this model the decals had to fit over the ribs and conform to the sides of the trailer. Because I had trouble before with the decals breaking apart, I oversprayed them with clear Floquil. When I tried to apply the decals, they again broke apart and would not conform over the ribs and snuggle down as needed. After ruining two sets of decals, I decided to take another approach.

I added smooth diagonal lettering panels as on trailer No. 30E34 pictured in this article. I made the panels from .005″ styrene. The keystone panels are 17″ x 17″ and the diagonal lettering panels are 16″ wide. The curb side panel slopes upward from rear to front between the two keystone panels. The door does not get covered by the diagonal panel. The driver side slopes upward from front to rear between the keystone panels. Use cement sparingly as it will melt the thin .005″ panels. Alternatively, you could use ACC to cement the panels in place to avoid melting the panels.

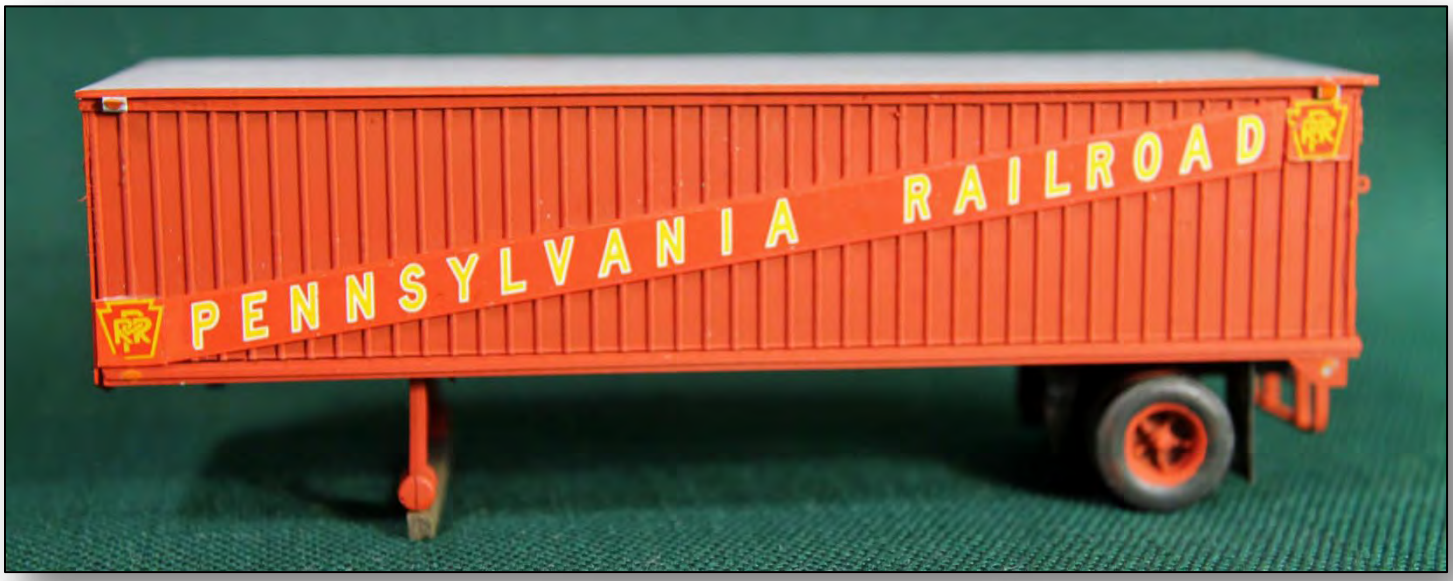
Landing Gear Crank Handle – Form a landing gear crank handle from .010″ brass wire. Bend in an "L" shape with a leg as in Part #1 of this series and cement in place.

Painting and Lettering – First paint the entire model with primer. Paint the roof aluminum and trailer body, landing gear, and wheels Caboose Red. I am uncertain of the chassis/frame color and whether it should be red or black. I painted mine black. If you have a Bethlehem Car Works Decal Set #3 you can use it or wait for the Mount Vernon Shops TrucTrain Decal Set. If you have a BCW decal set, I suggest that you over spray it with clear gloss to hold it together. I have had some of my sets break apart.



Landing gear crank handle. *(Drawn by Curt LaRue)*

▲ Curb side of finished trailer. ▼ Driver side of finished trailer



Nose and rear of finished trailer. ►

On the curb side apply a keystone decal at the lower left hand corner and another keystone on the upper right hand corner of the trailer body. Next apply the "PENNSYLVANIA RAILROAD" decal diagonally from the lower left to the upper right. You may need to trim the lettering to fit between the lower and upper keystones. Repeat the above on the driver side with the lettering being applied diagonally from the lower left hand corner (front) upwards to the upper right hand corner (rear) of the side. Apply one keystone on the nose about 20" down from the top and centered. The trailer number should be applied directly above the keystone.

Model built earlier without keystone and lettering panels. Lettering applied directly over side ribs when the decals were fresh and conformed over ribs.

As of this date I have not been able to find a complete number series for this family of 150 trailers. The earliest source I have found which lists PRR trailers is January of 1959 and it doesn't list any 30' or shorter trailers. The best I can do at present is to give you the following list of trailer numbers which I have found in photos.

Known 30' Trailer Numbers from Photos

30E31	30C326	30C330
30E34	30C327	30C337
30W710	30C328	

The trailer number should also be applied at the top center of each rear door as in the photo. A keystone should also be applied on each rear door about 10" and centered below the trailer number. The trailer number also gets applied on the curb side door.

Marker and Stop Lights – The upper marker lights on the trailer have rectangular bezels and the lower marker lights have round. To simulate the rectangular bezels for the upper marker lights, paint a strip of 2" x 4" styrene strip Chrome Silver. Cut off six pieces 6" long. Cement two of the small rectangles in place on each side on the upper front and rear corners and two on the upper corners of the nose as on the prototype photos. The rear of the trailer has no marker lights. I used the tip of a small toothpick to place a small drop of ACC where each of the silver rectangular bezels was to be cemented in place. Touch the tip of a .040" styrene rod to a small puddle of gloss orange paint. Touch the orange rod tip to the center of each silver bezel to create an amber "lens" on the bezel.

Early TrucTrain Trailer Numbering – 1954-1959

The trailer number was broken into three parts. The first two digits indicated the trailer length. These two digits were followed by an alphabet letter (C, E, or W). The significance of the letter is unknown. The letter was followed by numbers indicating the trailer number. Thus trailer 32E250 is a 32' trailer numbered 250.

The lower sides have round marker lights at the bottom corners. Dip a .060 styrene rod into a puddle of silver paint in the bottle cap and touch it to the lower corners on both sides per the prototype photos. After the silver has dried, dip a .040" styrene rod in gloss orange paint and touch it to the silver dots. This will leave a round marker light with a chrome bezel. To make the tail lights, dip a .060" styrene rod in silver paint and touch it just outside of the rear bumper in the recessed panel behind the bumper (see the prototype photo). When the silver dries, touch the silver dot with a .040" styrene rod dipped in Testors Tail Light Red.

Restraining Chains – To finish the model, install A-Line 40-link per inch chain in the chain restraining eyelets on the side and rear doors. There should be a slight droop in the chain.

Mud Flaps – Cut out two pieces of .005"-thick styrene 30" long x 24" wide. Cement them in place behind the rear tires but not touching the tires. Paint the mud flaps grimy black.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