# The S Resource

## S Scale

NEWS, REVIEWS, INFORMATION TO USE

June/July 2015
Volume 1 #5


**Resin Kits Part 2**
**2015 Spring S Spree**
**Bulk Covered Hoppers**
**Brian Jackson's Layout**
**and so much more...**

# Bill Of Lading

Published Bi Monthly

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**June/July 2015**
**Vol 1 #5**

Welcome to the online S Scale Resource magazine. The magazine is presented in an easy to use format. The blue bar above the magazine has commands for previewing all the pages, advancing the pages forward or back, searching to go to a specific page, enlarging pages, printing pages, enlarging the view to full screen, and downloading a copy to your computer.

Front Cover Photo

An ALCO S-2 switches an industrial area on Brian Jackson's layout.

Rear Cover Photo

Another view of the built up industrial area on Brian Jackson's layout.

**Page**



Advertisers Index



The Model Railroad Resource LLC publishes *THE O SCALE RESOURCE* also. Be sure to take a look. There are many articles in our magazines that are not scale specific, and will be of interest to you. Click this announcement to see the magazine online.

# Editorial Comment

Summer is coming and that means yard work and vacations. When making your plans, don't forget the S Scale National August 4-8 in Kansas City this year. You can get details on the show by going to the NASG website and looking for upcoming events. Besides the model show, there is a lot to see in Kansas City or on the way there. For many of us there is not a local hobby store that carries S Scale models. This is all the more reason to attend one of these shows each year. You can see the models in person and talk to the manufacturers. In addition, you can catch up on things with fellow modelers, many of whom you only get to see at the shows. I will be at the Kansas City National with the magazine this year and look forward to seeing you. Since I am talking about shows, Dan, Amy, and I all went to the Spring S Spree in Dayton. The show was good and there was a lot to see. We have a lot of photos of the show, the models, and the people who were there. Take a look at *Spring S Spree 2015*.

Dan and I went to see Brian Jackson in Springfield, Illinois and photographed his layout. Brian has a nice layout that has been a family affair for his whole life. Brian's dad, Robert, had S Scale models when Brian was born. As Brian and his brother grew, they worked with dad on the layout. After a few moves and revamping, the layout settled in Springfield. Take a look at *The Central California Railroad - A Tradition Continues*. In the last issue, Jim Kindraka and I took a look at some resin kits we have been working on. In this issue, I talk about detailing the gondola I was working on. I added a few extra details that I thought made the car more interesting. Take a look at *Resin Kits Part 2*. The last thing we have is some photos of brand new bulk commodity covered hoppers. On the way home from the Spring Spree, I saw the cars and photographed them for some prototype information.

Enjoy the issue and make your plans to attend the National. Hope to see you there.

Glenn Guerra

# A.R.A. Box Car Kits

'S' Scale

IN 1924 the American Railroad Association's Committee on Car Construction reviewed drawings of a 40-foot steel-sheathed box car. Although not approved overall, the Pennsylvania Railroad had over 30,000 built to the design with several thousand others built for a number of other carriers. Our kits is of injection molded styrene consisting of separate roof, floor, sides and ends with individually applied detail parts. All of the models in the photos were assembled with Testors™ liquid cement. Assembly is similar to that of a plastic model airplane kit. Lettering for the cars pictured is available as well. Three different kits are offered:

- SSA700 with a Panel Door
- SSA701 with a Youngstown Door
- SSA702 with a CRECO Door

Kits $48.00 Each

*Each kit is less trucks, couplers and decals.*


BALTIMORE & OHIO – Decal SSADB&O1


PENNSYLVANIA "Buy War Bonds" – Decal SSADPRR16


CHICAGO GREAT WESTERN – Decal SSADCGW1


PENNSYLVANIA "Shadow Keystone" – Decal SSADPRR17


LEHIGH & NEW ENGLAND – Decal SSADL&NE1


SEABOARD AIRLINE "Orange Blossom Special" – Decal SSADSAL1

***Additional lettering for several more roads are under development. We would love to offer the DT&I scheme, but as yet we have not been able to find a prototype photo or lettering diagram.***

Decals $7.00 Each

All kits and decals are available direct from Des Plaines Hobbies/S Scale America by calling 1-847-297-2118 and may also be purchased online at: www.desplaineshobbies.com

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# News And Reviews

A big reminder that the NASG S Scale National Convention will be in Kansas City, Missouri this year. The convention dates are Wednesday August 5th through Saturday August 8th. For more information and registration forms go to: http://www.nasg.org/Convention/2015/index.htm

Ron Bashista from American Models tells us that they are shipping the new Alco RS-11 models. Ron had some at the Spring S Spree in Dayton recently. They look like nice models. See their website for more information.

Al Castellani from East West Rail Service showed us some window blinds he is making for passenger cars. They really add a nice touch to the car. See their website for more details.




Bob Hogan sent us some photos of a few models he built hoping to inspire others to get some kits out.

B&M #71211 is unique in that I purchased an old '50's kit (I do not remember the brand) and it was just too poorly done to spend time making. The ends, however, were rough resin castings of flat steel ends (ala NYC, PRR and B&M). They were too good to waste, so I built one of B&M's small 710000 series cars. It was the only one running on the Bristol Club layout. Added details came from Grandt Line.

WP #26802 is a model of their 1916 built boxcars. Most of these were converted to cabooses and MofW cars by the 1950's, but I had to have one of the "as built" cars. Again, stock milled wood roof/floor, basic wood parts from current producers, and added details from Grandt Line and PRS.

GN #31028 was scratch-built as per above. This car had a 10' 6" inside height, which was high for a composite car, so I had to have one.

Dan Navarre of River Raisin Models told us he is in the final stages of producing models of the early Lima 2-8-4 Berkshire type steam engines. These will be the early models with 63” drivers and the articulated trailing truck. Many railroads had these. Dan is planning on producing a few variations. Contact him to see if your favorite will be one of them.

Lee Rainey had his S and Sn3 layout open recently and dropped us this note.

The Pennsylvania Railroad Technical and Historical Society holds an annual meeting that rotates among former Pennsy service areas. This year’s meeting was held in Middle Division territory, and as always, included tours of local model layouts following a Pennsy theme. That made Lee Rainey’s S/Sn3 layout a natural for the tour, because it features the interchange between the Pennsy Middle Division and the East Broad Top narrow gauge in Mount Union, PA.

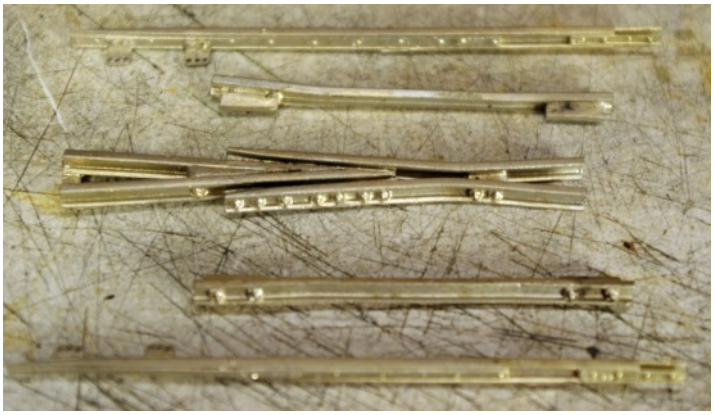
The around-the-wall, permanent, basement layout occupies a 14' x 21' space, and focuses on recreating the scenes and operations of a single town, which for many years was the largest shipping point on the Middle Division. Heavy PRR steam and first-generation diesels haul mainline freight and passengers through Mount Union (actually, from one staging yard to another). Meanwhile PRR and EBT yard jobs can work the extensive dual-gauge trackwork.

Typical comments from visitors were "I have never seen an S scale layout before", "S is the perfect scale", and "I never imagined so much was available in S."

56 Pennsylvania Railroad Technical & Historical Society visitors saw Lee Rainey’s layout recently. For many, it was their first exposure to S scale.


Lee made this poster to illustrate the real scenes that will be implemented on the layout. Scratchbuilding these prototype structures is underway.


An Omnicon PRR M1a leads a passenger train through the upper yard on Lee Rainey’s layout. The cardboard mockups suggest future buildings.



John Pautz of American Switch and Signal manufactures and markets switch components for people modeling in P:48. The components are made to match Micro Engineering code 100 and code 125 rail. Bill Lane has used these and tells us they will work for S Scale. This may give the S Scale modeler some additional options on switch frog numbers. John sells these direct and through Right O Way Products. Be sure to get the P:48 versions. Drop John an email at jfpautz@pwrtc.com for further information.

# 2015 Spring S Spree

*The main hall at this year's show. There is more to the left and right of this photo, as well as, another room full of layouts. All in S Scale.*

By Glenn Guerra

The Spring S Spree show was held May 8 and 9 this year in Dayton, Ohio, and is hosed by the Miami Valley S Gaugers. The show is held in a 9000 square foot hall with over 100 tables. They had door prizes, clinics, and a pizza dinner on Friday evening. There were several display layouts, and the larger club layouts had high rail as well as scale loops, and all equipment was running. There were also some layouts featuring 1950's American Flyer trains and the same era structure kits for people who like collecting and running their collections. In short, there was a lot to see.

If you do not attend any of the model shows, I would recommend that you go to some of them. If you are considering modeling in S Scale, there is no better way to see what it is all about by attending a show like this. Not only is there is a lot to see at these shows – you will meet many people who have the same interests. There are not many hobby stores anymore, and it is difficult for many of you to see the models that are available now or models that have been produced in the past. In addition, there are many manufacturers whose products are not on the store shelves, and the shows are a place to see them. You will meet the manufacturers and talk to them about the models. The clinics can be very informative and helpful. If you are running older collectable equipment, there are many people with replacement parts to help you keep your models running. Check your show listings and see if there is a show you can attend some time.

Let's look at some photos from this year's show.


*The Southeastern Michigan S Gaugers had their layout set up at the show. When this layout is not set up at shows, the members meet at each other's houses in a round robin fashion. The layout features two loops of track built to scale standards, and one loop built to handle the bigger flanges of the high rail equipment.*

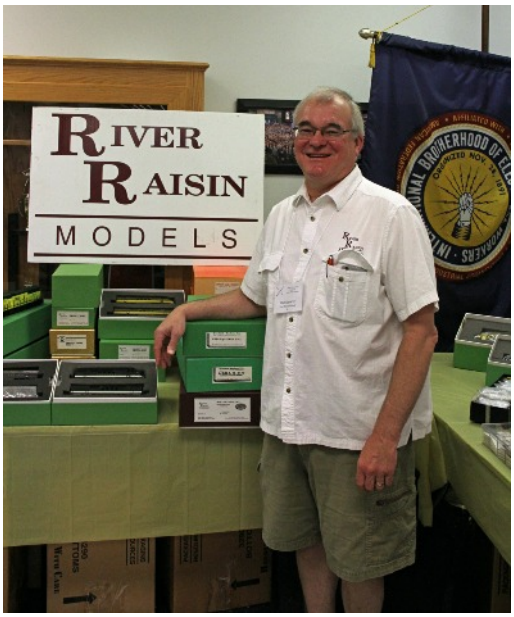
*The NASG had their switching layout on display this year. This layout gives people a chance to see how the DCC control system works and ask questions about settings and performance.*



*The Central Ohio S Gaugers had a large layout at the show this year. The layout runs scale, as well as, high rail equipment on many different levels. The depot shown above is an example of the scenery on the layout.*


*Bob Johnson had this layout set up with all vintage models from 1960 and before. This is an example of a nice display for a collection, and a nostalgic way to run it.*

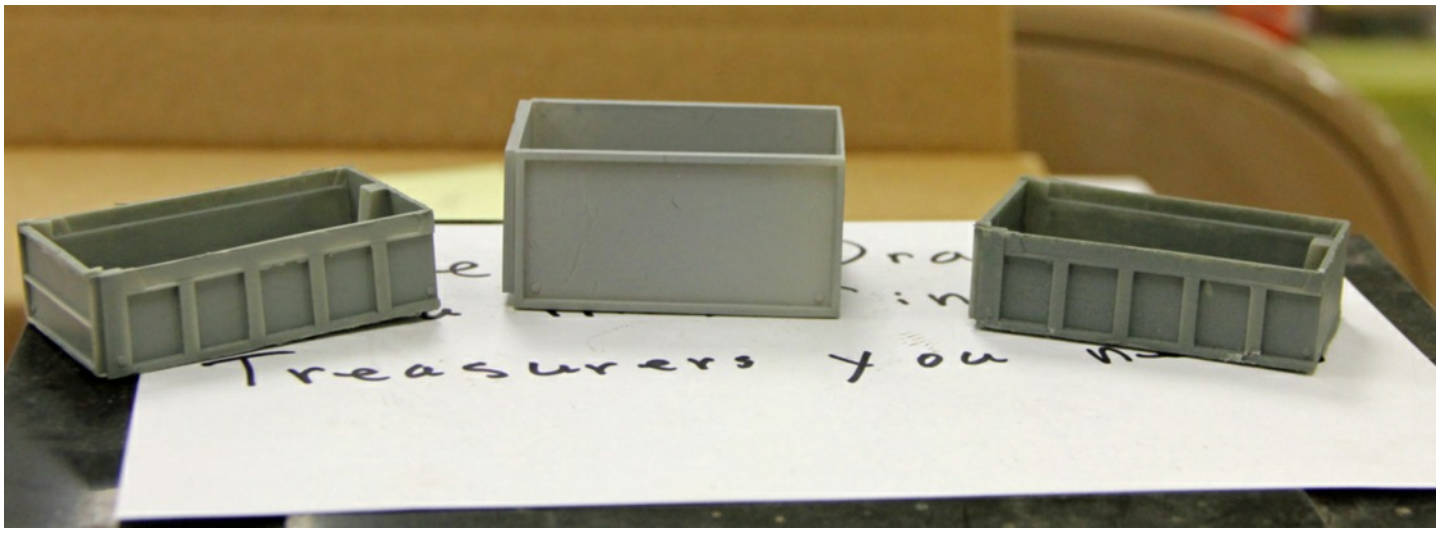

*The NASG had a table set up with information about the organization. In addition, they had track gauges, coupler height gauges and copies of their magazine for sale.*


*Dan Navarre of River Raisin Models was at the show with his complete selection of brass models. Dan was showing drawings of a new project he is working on. The project will be the early Lima 2-8-4 Berkshire steam engines. Many railroads had these locomotives with the distinctive trailing truck. Dan is considering the Boston and Albany version, Boston and Main version, and a few other variants. If you have a favorite, contact Dan to put your request in. Dan also sells collections, and he had the Monon EMD BL-2 shown above. This model had a resin body that was produced in limited quantities. This is yet another reason to come to the shows.*


*There was a display table where people could display models they built. By the end of the show, this table was full of models.*


*Ron Bashista from American Models was there with an extensive display of their models. They have just released their Alco RS-11 model in Delaware & Hudson, New York Central, New Haven, and Southern Pacific paint schemes. The models come with high rail or scale wheels. The model shown above has the high rail wheels and couplers. The model is well detailed and runs well. It is a nice compliment to the other models produced by American Models.*

*Roy Meissner (on the left) from Merton, Wisconsin was at the show selling some of the cast resin parts he makes. Roy develops these items for his own layout and sells extra parts at the shows. Above are some dump bodies he made to fit a commercial truck chassis kit. The short box is for a stone or gravel load, and the tall box is for a coal load. He also made the bridge girders and tunnel portals shown below. You won't see these items on any store shelf. Again, this is another good reason to attend a show.*

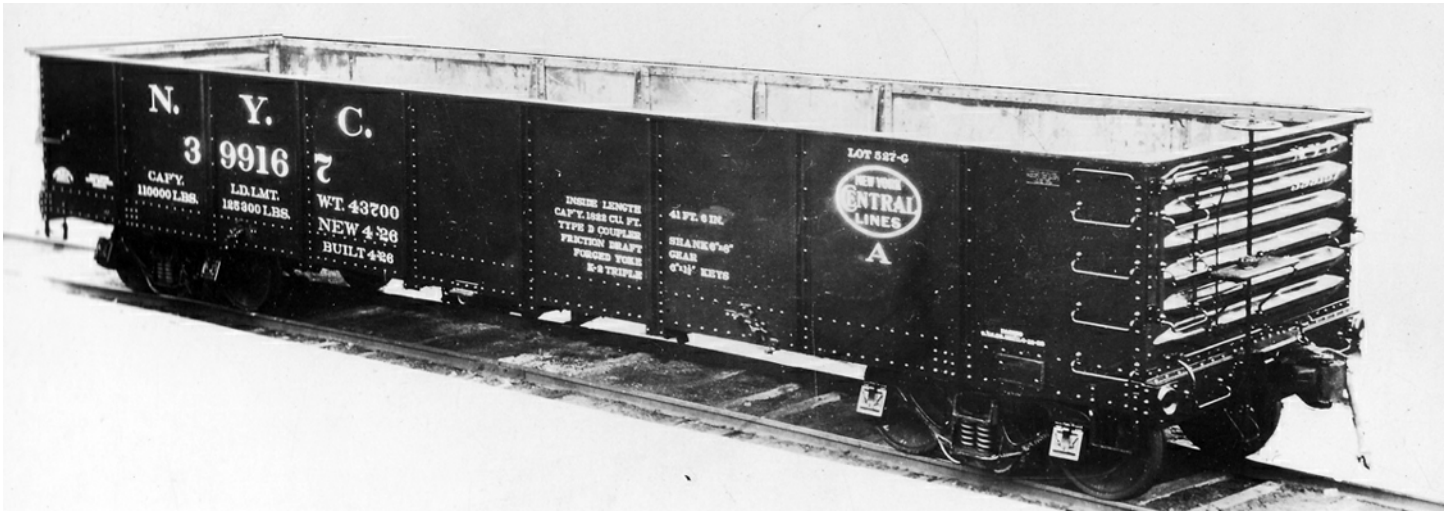

*Al Castellani and his wife, Edie, were there from East West Rail Service. Al makes some very well detailed and well engineered kits. Pictured above is the C&O stock car. This is a wood laser cut kit with many cast detail parts. He also has a SOO Line stock car of the same vintage. Below is a new structure kit he is working on. The model will have a small office that can be made attached or separate so it fits your space better. This is a good example of the engineering work Al puts into his kits. The roof has real corrugated metal for panels. This looks like it will make a nice kit.*

# Resin Kits Part 2

By Glenn Guerra

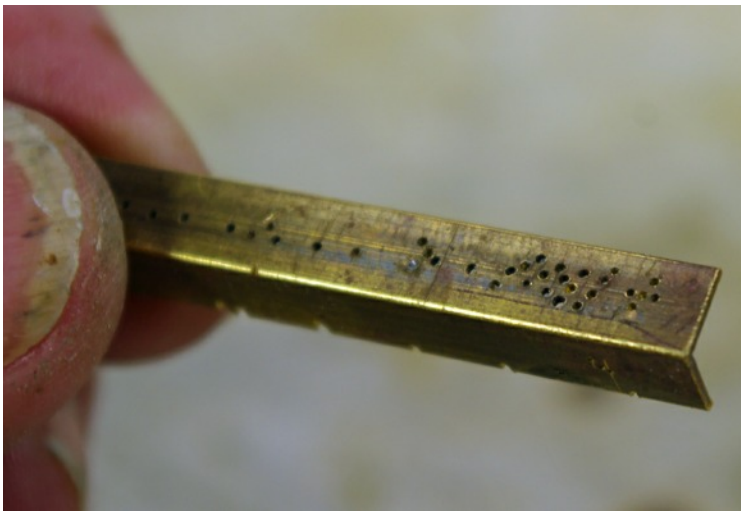
In the April/May issue of *The S Scale Resource*, we talked a little about resin kits. We covered some of the ways the kits are produced and some of what it takes to build them. As Jim and I were building our kits and talking about them, we started to look at extra details we could put on, and we thought this merited another article. For this article, I will go into some of what I did to finish and paint the gondola I was working on.

The model I was working on was a New York Central 40 ft. Gondola. These cars were built from the 1920's through the 1940's, and there are a lot of variations. Matt Gaudynski loaned me this kit so I could take some photos of it for the last article, and I decided it would be fun to build. Matt is modeling in the 1960 era, so I needed to make this car fit that era. Jim came up with some photos of cars when they were new, and one of them had four braces inside. According to New York Central records, lot 527-G was made in 1926 by Standard Tank Car Company of Sharon, Pennsylvania. The cars were made with four drop doors when new. Similar cars were made for the Big Four and Michigan Central. Also, according to the New York Central records, the cars were rebuilt with flat floors. I thought the four braces on the inside made a nice detail. Open cars can be a little plain sometimes, and the bracing would add nice detail that could be easily seen.

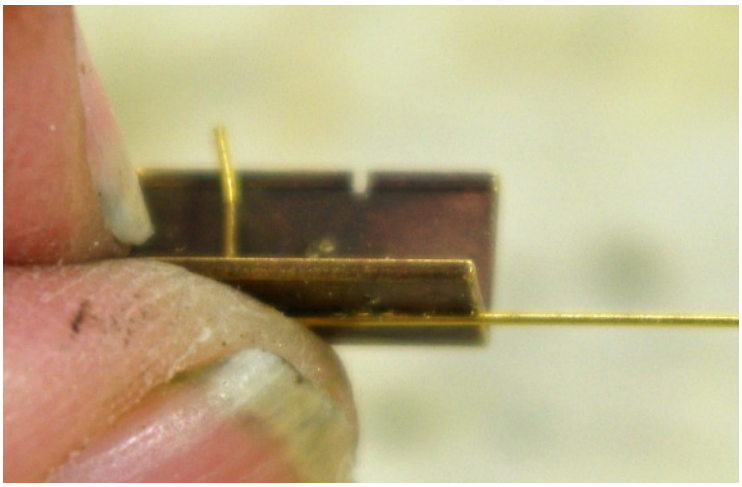


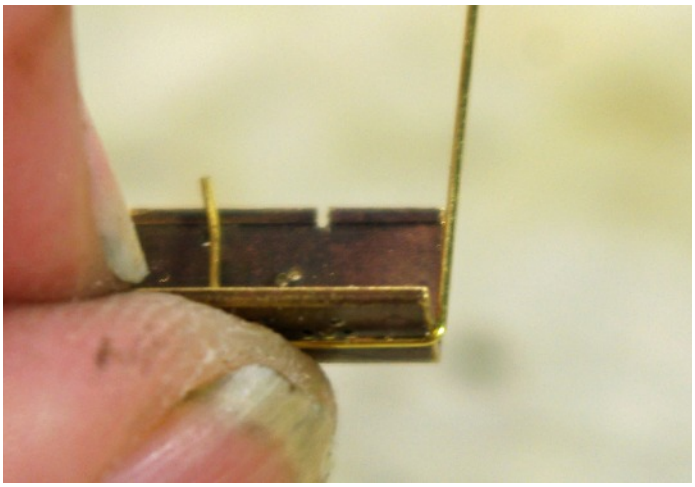

*Jim came up with this photo courtesy of the New York Central Historical Society. I liked the four braces on the inside of the car. Also, notice that the inside of the car is not painted.*

After putting the body together, I worked on the grab irons. One of the things about a resin kit is that the sides and ends are usually cast separately and the grab irons mount to the end casting and the side casting. When you are fitting the ends to the sides, you usually sand the joint a little for fit. This means you have changed the dimension of the grab iron mounting holes. This kit had pre-bent grab irons, but I decided to bend my own since I had changed the distance between the mounting locations. I made the grab irons out of .015" diameter wire. That's 1" grab irons which are a little big, but they look OK. I think .010" diameter wire, which would be .64" on the prototype, may have been a closer match. Next time, I will try that and see how it looks. Bending grab irons is not hard with a simple fixture. I made mine from some scrap brass. Drill a #77 hole the correct distance from the edge of the brass. Bend a bit of the wire and stick it in the hole. Then, bend the rest over the edge of the brass. You can do this with styrene also, but the fixture will not hold up as well. Some of you are now saying, "How do you know where to put the hole?" You can use some dividers. Open them so one point will be in one hole on the model, and the other point will be in the other hole. Then, touch the edge of one point on the divider to the edge of the brass and scratch a line on the brass. Drill a #77 hole on the line and it should work fine. You can also measure the distance with your caliper or just hold the brass up to the car and mark it with a pencil. If it is not right, drill another hole just a little closer or farther from the edge to get what you want. To make a drop grab, I bend the ends using the tip of a small pliers. Judge where you want the bend to be and notice where you are pinching the wire in the pliers. Hold all of them the same way so that they all come out looking the same.

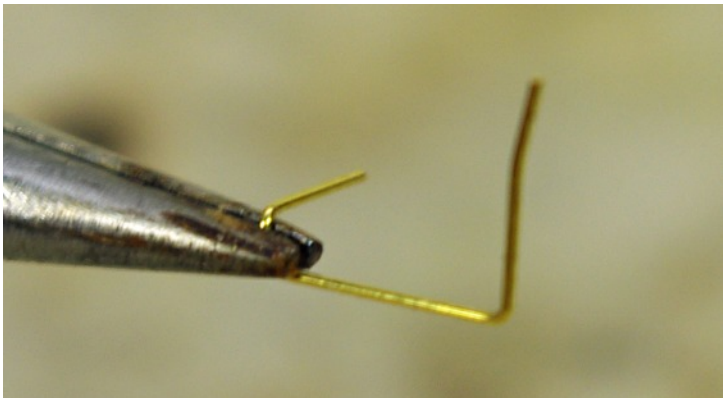


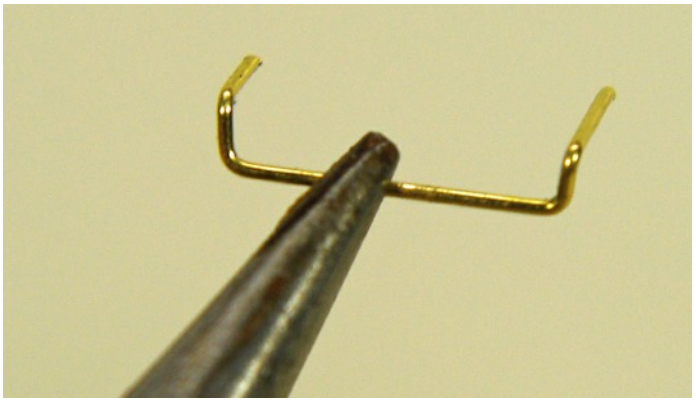
*I made this grab iron bending fixture from some scrap brass. You can see all the holes in it. I use it a lot. You can make this in styrene, but it will not hold up as well. A flat piece of brass will also work. I just happened to have this piece of angle, or I should say "it was the first thing I picked up".*





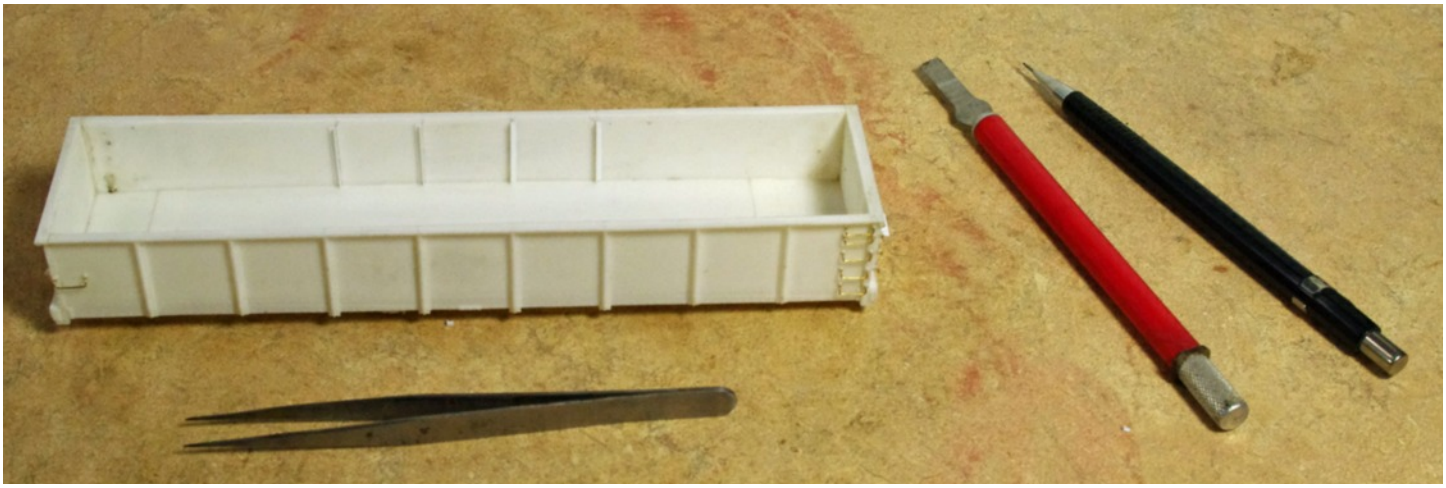
*To make a grab iron, bend one side first with some small pliers. Then, insert the piece into the correct hole on your fixture. Bend the end over with your fingers. Fix up the bends with the pliers and cut to length.*





*To make a drop grab, hold the bent grab iron at the tip of some small pliers and bend it over as shown on the left. Remember where you held it in the pliers and do the same for the other side. If it helps, put a small mark with a Sharpie pen on the tip of the pliers so you know where to hold the grab iron. That way, they will all come out the same.*

When drilling the body you can use a pin vice. This is very accurate, but slow, even in the easy drilling resin. I have an adapter for my drill press that takes small drills and used that to drill the holes. On other models, I have used my motor tool (Dremel) and that works well. One thing you should do is mark the holes first. I use a "T" pin and that works fine in resin. Poke the model where you want each hole to be. This will work like a center punch in the soft resin, and will start the drill accurately where you want the hole. Don't try to do the whole depth at once. The resin will clog the flutes on the drill. Once this happens, you will develop friction and heat which will soften the resin, causing the drill to grab and break. Expect to break a few drills. Don't worry – they are cheap at around $1.20 each. Once all the holes were drilled, I glued the grab irons in with ACC glue. I keep a can of acetone around and a small stiff brush. Acetone is the solvent for ACC glue and for lacquer paint like Tru-Color. I put a small drop of the ACC on some scraps and dip the grab iron ends in it. Then, I insert the grab iron in the car. Use a scrap of styrene for a spacer or the tip of some small pliers to gauge how far you want them from the side of the car. Some of the AC will rub off the grab iron when you insert it, and that is what the acetone is for. Dip the brush in the acetone and wash the side of the car around the grab iron. This will remove the excess glue. Do not do this on a styrene car because you will melt the styrene. I stopped when I had the grab irons in. Next were the interior braces and other details I thought would be a problem when handling the car a lot.

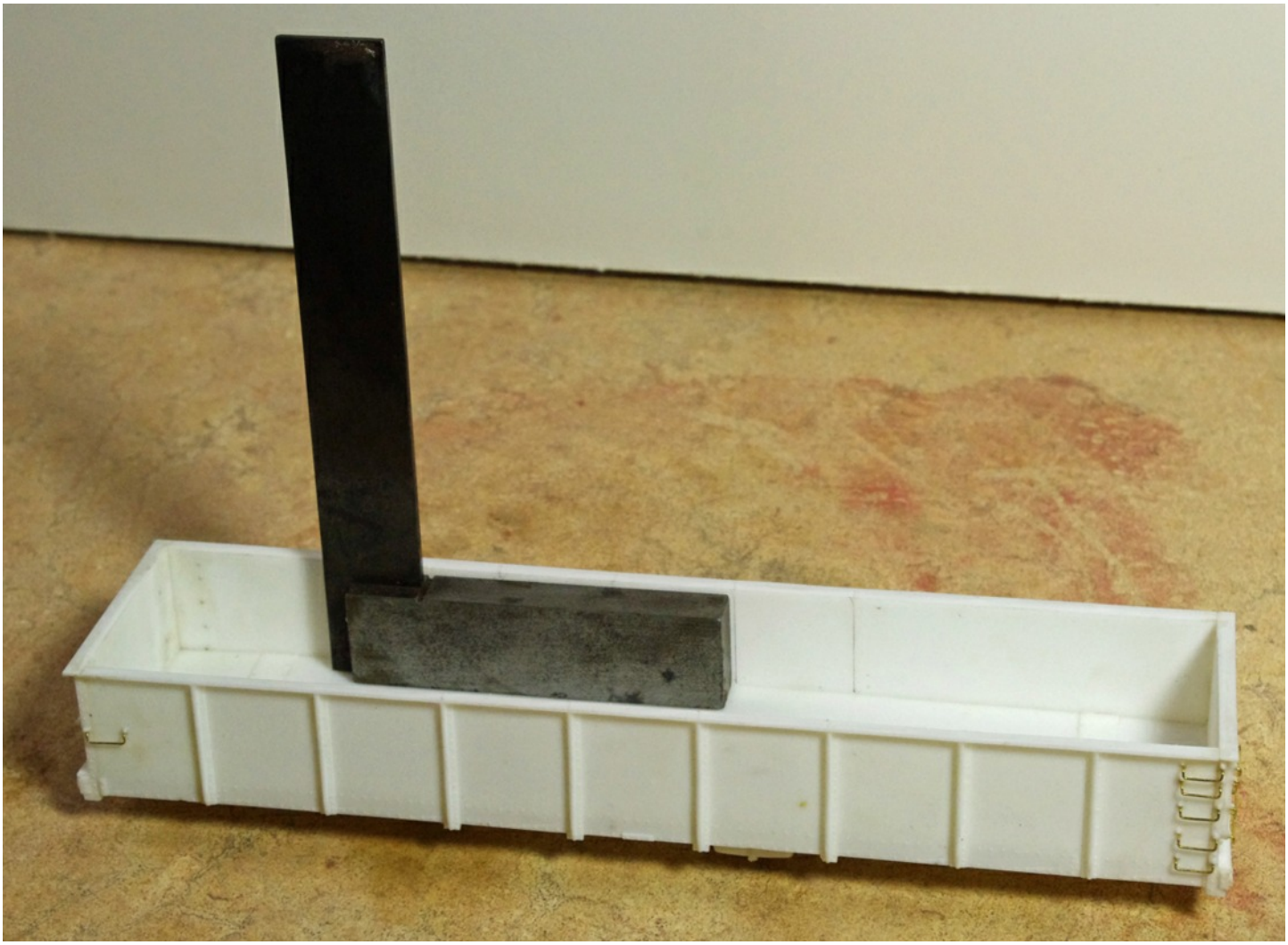


*Here are some of the tools I used to make the internal bracing. I like the chisel tip on the hobby knife better than the regular blade for cutting small pieces. The chisel blade has a flat side that gives a nice square cut. The fine line mechanical pencil is good for marking.*

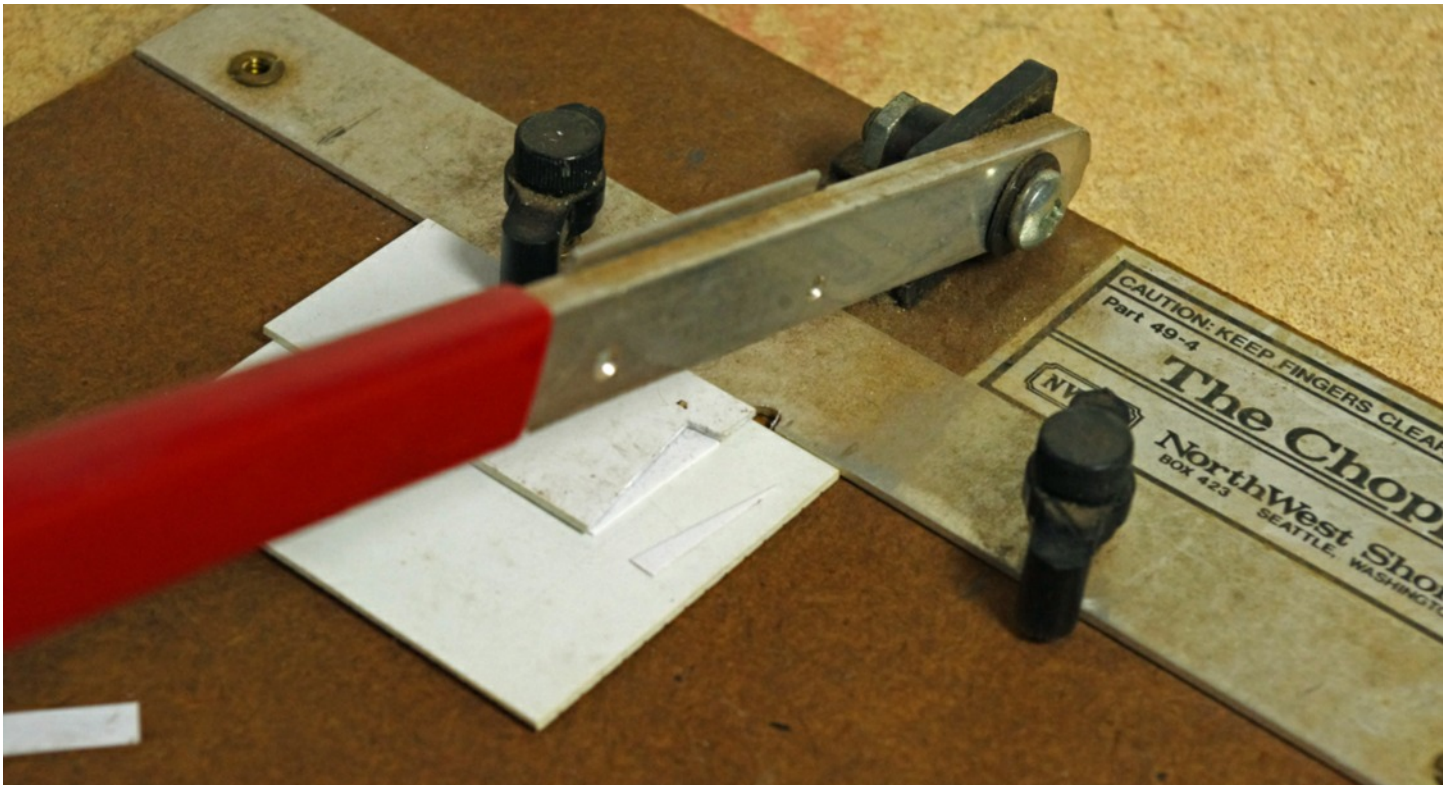
As I mentioned, I liked the version with the four internal braces. These line up with the outside braces so locating them was easy. I used a fine point mechanical pencil and marked on the top flange where I wanted the internal brace to be. Then, I used my small square to draw a vertical line on the inside of the car. Next, I glued 1/16" styrene angles to the side of the car with ACC using my lines for reference.

I cut the styrene angle with the chisel tip for my hobby knife. I like this tip because one side is flat, unlike the regular blade that is tapered on each side. With the chisel blade, I put the flat side to the piece I want to keep and cut. I get a nice square cut on the piece I want to keep. I glued the angles in so two of them had flanges facing one end, and two of them faced the other end. Next, I needed to cut the brace itself.

I made the braces starting with a piece of .188" X .010" styrene strip. The first step was to cut them all to length. I used my chopper for this. I have not used this much and had to remember where I put it. The chopper works well on thin material like this, but I have not had good luck with thicker material. The razor blade is ground on both sides and tends to make a "v" cut in thicker material. I tend to use the chisel blade in the hobby knife more. For this .010" thick material, the chopper worked great and was fast when I used a stop with it. The next problem was how to taper the braces. Drawing a line and cutting a straight edge using a ruler did not work. I could not hold the ruler down tight and it kept moving. To solve this, I made a simple fixture for the chopper. First, I needed a piece I could clamp to the chopper that would hold the piece I wanted to cut. This way they would all be cut the same. I made this from a scrap of styrene by cutting a notch in it for locating the piece I wanted to cut.



*To make sure the inside braces were located right and straight, I used my small square as shown. I used a fine mechanical pencil and marked lines on the inside of the car for reference.*

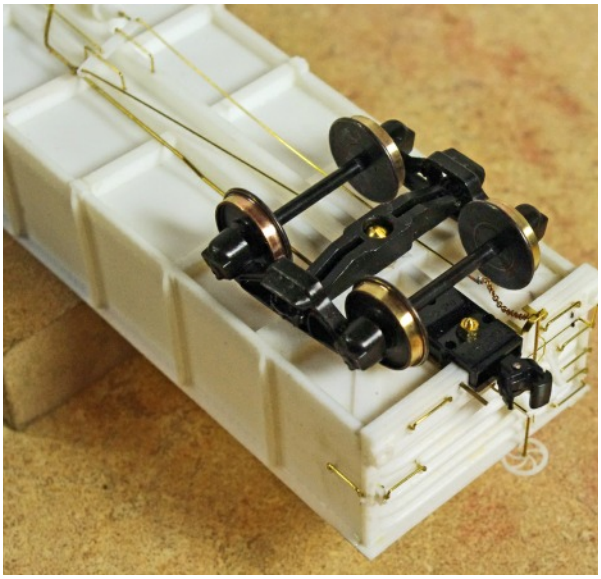



*This simple fixture for my chopper took a few minutes to make, but it was worth it. Once it was set, all my braces came out the same. I cut them to length first, and then cut them in this fixture to get the taper. The styrene backing plate was needed because the base of the chopper has a rather large groove in it and the small parts did not cut well because they fell in the groove. When I put the styrene base in, the razor blade no longer met the styrene base squarely. I fixed that by grinding the slots in the razor blade a little bigger with the cut off disc in the motor tool. I closed the arm until the razor sat flat on the styrene and then tightened the screws that hold the razor blade.*

The second problem was that the chopper wears a hole in the base after a while, and this was causing problems because the small pieces tended to fall in the hole and not cut well. I used another scrap of styrene as a base. This worked well, but now the razor blade did not contact the base squarely all at once. I solved this by getting the motor tool out and grinding the slots in the razor blade larger so I could adjust it. I installed the blade loosely, and moved the arm of the chopper down until the blade met the base squarely. Then, I tightened the screws that hold the blade in place. It worked like a charm! Now I had something that I could make a lot of repetitious cuts with. I held the pieces in the fixture with the sharp point of a tweezers or a pin so I didn't cut my fingers. Now to glue them in.

I glued the braces in with ACC using tweezers to locate them. I applied the ACC to the edge of the brace and the bottom before I put it in. Wipe it with the brush of acetone to clean up any excess glue, making sure the brush is damp *not* wet. Remember, Acetone will melt styrene if you use too much. Rinse the brush in clean acetone so it will be clean for the next time. Once I had all the braces in, I needed to cut the small angles that are riveted to the floor of the car. I cut them to length first using the chisel blade hobby knife. Then, I cut a small angle on one side of the angle. The angle stuck out farther than the brace, and was cut back at an angle. I glued these in, and I was finished with this part. I think if I was doing this as a contest model, I would have added some rivet detail and tried to figure out how to do the corrugations on the ends, but enough is enough. As my friend Norm used to tell me, "from the back of a galloping horse it will look just fine".

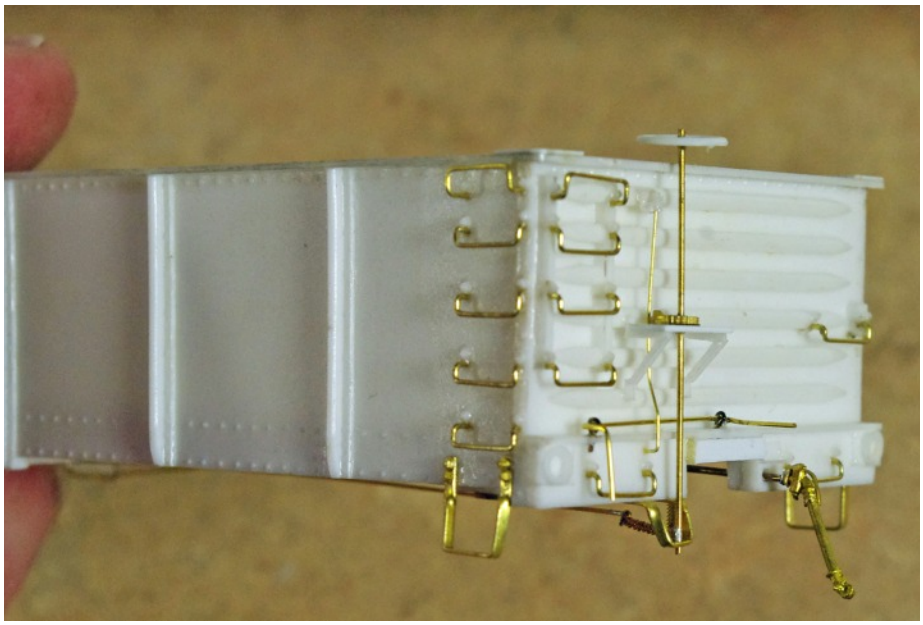
Next, I worked on the brakes under the car. I drilled some holes in the end beam of the car so I could locate the main air line. Then I drilled the resin air brake parts that came with the kit. Drill the holes deep so you have some wiggle room when installing the wire air lines. Glue the air tank, distributing valve, and brake cylinder in place. Start bending up some .010" wire to connect the devices.



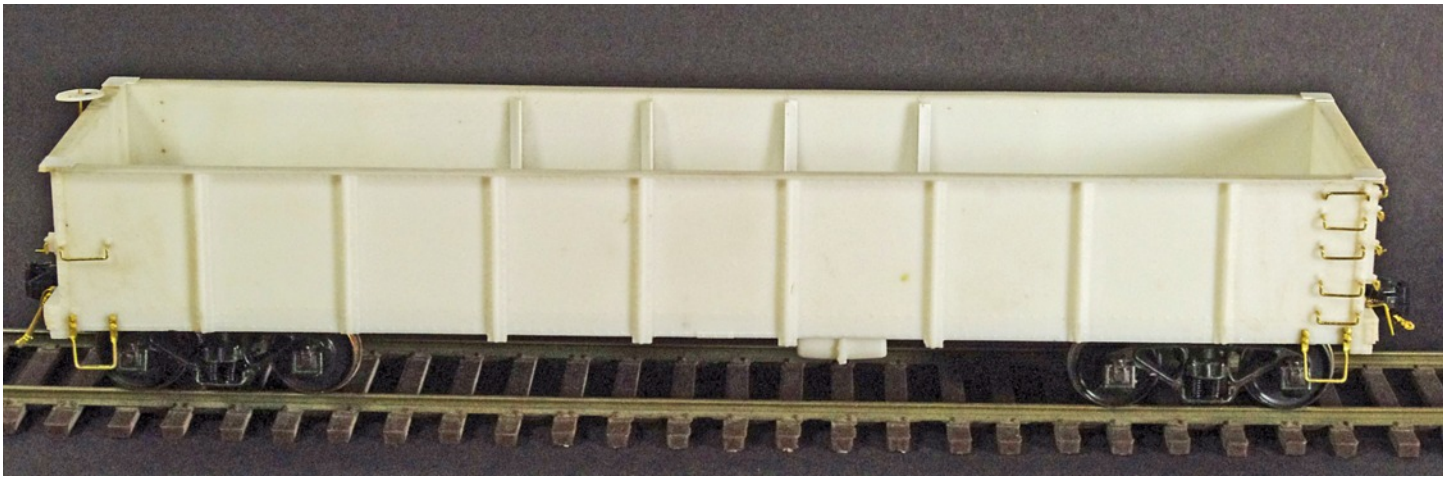
*On the left, you can see how the head of the flat head screw is flush with the floor and will hardly show when the car is painted. On the right, you can see the 0-80 nut holding the coupler on. Now I have a good solid mount that does not rely on threads into the resin.*

Bending the air lines is just a lot of trial and error before you get it right. After that, I installed the brake levers and rods using ACC again. I needed to bend up some .015" wire for safety hangers. I drilled some holes in the center sill and glued them in place. The brake levers ride on these safety hangers when in use, so I glued them in place. This made the whole brake system a lot more durable.

At this point, I decided it was time to mount the trucks and check the coupler height. I used some 2-56 threaded bushings from Mullet River for the center bearings. I drilled a hole in the bolster using the drill press. Set your stop so you don't drill through the floor of the car. Notice in the photo how I located the center of the bolster. Draw the diagonals from the corners of a rectangle – where they cross is the center.



*These photos show some of the details on the car as I was going. Notice in the left photo how I located the center of the bolster for drilling. I used a brass threaded bushing to mount the coupler. This works better than threading the truck screw into the resin. Also, notice the 0-80 screw used to hold the coupler in place. I needed to add a piece of styrene to the end beam above the coupler – this is visible in the photo on the right.*

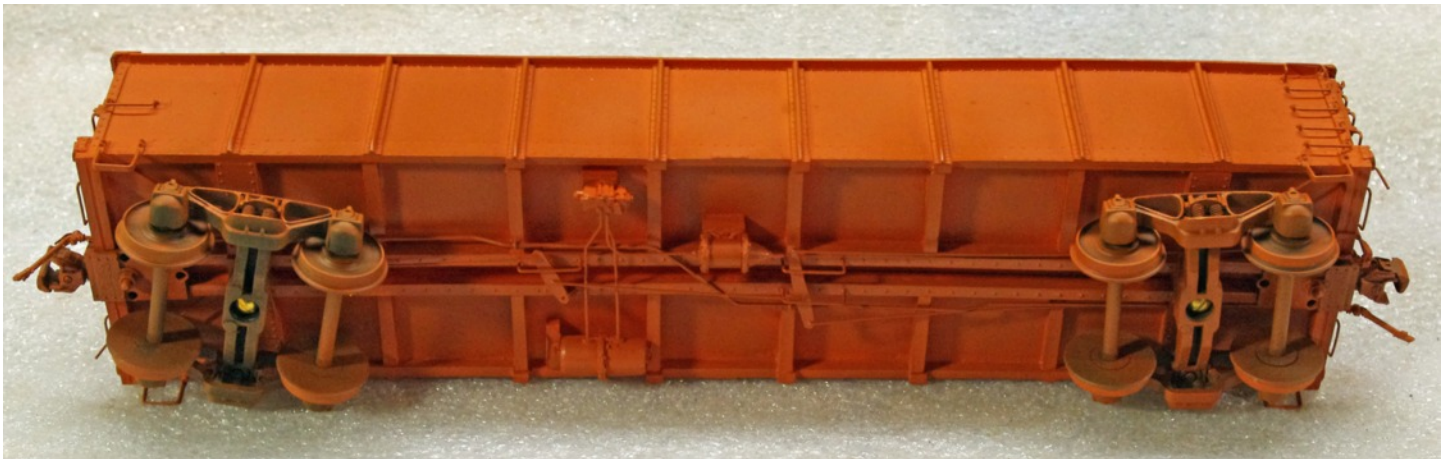


*Here is the finished car ready for paint. I made brass steps because they would be more durable than the cast steps that came with the model. Matt intends to operate a switching layout, and the cars will get a lot of handling.*

I mounted the trucks and checked the coupler height using the NASG gauge. The car was a little low which was good since the wheels were very close to the car floor. I used a 2/56 washer as a shim, and it came out just right. Now to mount the coupler.

The floor is too thin to screw the coupler into and have it hold. In addition, since I detailed the inside of the car, I didn't want the screw to show. I decided to use an 0-80 flat head screw about 3/8" long. I located the coupler box on the bottom of the car and drilled through the floor. Then, on the inside, I drilled a counter sink for the flat head screw. I checked the fit with the coupler box on and an 0-80 nut holding it. When I had the counter sink right so the screw was flush with the floor, all was good to go. I took it all apart and applied some ACC to the screw and put it back in. Now, I had a good mount for the coupler that would not show and would not come out. On to the final details.

I purposely left the corner steps and brake wheel off until the very end. The car will get a lot of handling, and I did not want these parts in the way or broken. I made the steps out of .015" X .040" flat brass wire. I bent them up using a small needle nose pliers. Just remember where you grabbed the wire in the jaw and they will all come out about the same. Hold the side with one pliers and twist the end with another. Then, mark the location of some mounting holes. I use a carbide scriber and push hard. It leaves a small dimple that is just right for starting a #76 drill. Drill them to accept some nut bolt washer detail. I like to add this not only for looks, but also for strength.



*The underside of the painted model so far. S Scale is big enough that you can add some of this detail to your models without it being another form of self abuse. It's fun once in a while to push yourself and see what you can do.*

Then, glue the step to the side of the car. Drill out the holes in the car and insert the nut bolt washer detail. Glue it all with ACC. The nut bolt washer detail will act like pins and give the step more strength. I made the base of the brake staff the same way. I soldered a short length of chain to the brake staff and inserted it into the base I made. Thread it through the platform first, and then back through the base. Now, insert the ratchet detail and glue it in place. This will also hold the brake staff. The kit had a retainer valve, so I drilled out the base for .010" wire and glued it in place. I drilled a hole in the end beam for the air line to the retainer. Then, I bent up an air line for the retainer and put it in place. Jim had a set of brass air hoses and glad hands. I drilled out the end to fit the train line I used; and I tinned the train line with a dab of solder. I applied some flux and used my resistance soldering unit to solder the hose to the train line. This is one of the reasons I like my resistance unit. It's 100 watts and will heat that joint before the rest of the wire gets too hot to melt the resin. If you do this with a normal 100 watt iron, the radiant heat from the iron could damage the resin. As long as I was soldering, I soldered the loose chain to the hand brake rod under the car. I did this with the 35 watt iron. To do this, pick up a dab of solder on the tip of the iron. Apply flux to the end of the rod. Hold the chain with some tweezers and touch the joint with the iron. It will instantly heat and the solder will melt. Pull the iron away and let it cool. If it is not right where you want, fiddle with it a little and it will work. I use acid flux, and here is one of the reasons. Go over to the sink and run some water over the end of the model and you have just removed the extra flux. No messing with solvents and greasy flux that can mess up your paint job. Next were the coupler cut rods. They are mounted in small eyes. There were plastic ones in the kit, and I figured I would break them all just trying to install them. I had some very small wire eyes from Detail Associates so I used those instead. Bending the rods was a bit of trial and error again, but I finally had something that would work. The last thing I did was glue the resin brake wheel in place.

*I wanted the car to have a faded paint look. Rather than start with freight car red and try to fade it with weathering, I decided to try and fade the paint first. I added yellow to the mineral red freight car color and got a faded look. The inside of the car is painted with rust color. After the lettering, I will weather the car.*

At this point, the model was ready for paint. I wanted the model look used. Since gondolas are not painted inside, I painted the inside with some rust color. On the outside I wanted to get a faded look, so I added some yellow to the normal mineral red. Now I will letter the car and weather it, but that is the topic for Part 3 in this series of articles. Stay tuned and see you next issue!

# The Central California Railroad
# A
# Tradition Continues


*This is the first view of the layout when entering the room. The layout is about chest high, getting the trains right up in your face where you can see them. Considerable time was spent thinking about the lighting and it shows. The handrails are a nice touch that keep people from leaning on the layout.*

**By Glenn Guerra**

**Photos By Dan Dawdy**

Recently, Dan and I went to Springfield, Illinois to visit with Brian Jackson to see his layout and photograph it for an article. As we were talking to Brian, we started to learn more about story behind the layout. What you are going to see is an ongoing family project. For now, let's go back to the beginning.

*The central valley of California is very flat and the flat nature of the layout does it justice. At the south end of the valley, the railroad enters the Tehachapi Mountains. They start rather abruptly with rolling grass covered hills as you see on the right of this photo. In Bob Jackson's vision of the layout, he was modeling from Fresno, where he grew up, to Sacramento. Brian incorporated the climb into the Tehachapi Mountains which is at the far southern end of the central valley. The layout was a father/son undertaking, and Brian was able to model that area.*


*The train enters the foothills of the Tehachapi Mountains to start the climb. The way the hills are done here is a nice effect. Note how the scenery color is different on each hill to help define it. When viewed from a side angle, you can see how they are just silhouettes. However, when viewed more head-on, they give the feeling of great distance which is what you get looking at the real mountains.*

*This view of the layout looks the other way from the photo at the top of the previous page. The highway parallels the railroad in the central valley and is lined with fir trees and eucalyptus trees. Note the use of a lot of dry grass which California is noted for. Brian said that they wanted to model late summer, and the colors they picked are just right. These types of details help to convey the feeling of reality if you are modeling a specific area like this.*


*Dan liked this scene. The silhouette of the mountains gives you the feeling of far away mountains. They spent a lot of time thinking about lighting and it shows in this photo. The dry air and bright sun casts hard shadows in California. Look at the shadow of the porch on the side of the building. That would be hard to do with diffused lighting, but the direction lighting used will cast that shadow.*



*There is a lot of rice grown in the central valley of California and big elevators like this are common. This whole complex is over 5 feet long. Brian said they do not get into much operation and switching. This would be a fun complex to switch. There are lots of cars coming and going, as well as, some distance for the switch engine to travel. In S Scale, a building like this can make as good a backdrop as a mountain.*

The Jacksons lived in Syracuse, New York where Brian's father, Robert (he was known as "Bob" within the S scale community), worked as a college professor. Bob had an S Scale layout for himself. When Brian and his brother, Timm, were young they were given an American Flyer set to run. This kept their hands off of dad's scale trains until they were older. In 1973, Brian's father was offered a position in the medical school at Southern Illinois University and they moved to Carbondale, Illinois. Brian said that there were no basements in the homes in southern Illinois so they had very limited space for a layout. By now, he and his brother were old enough to work with the scale trains and they helped their dad build an "L" shaped switching layout. In 1988, dad was transferred to the Springfield, Illinois campus of Southern Illinois University. Brian was already in college himself at this time. A new home was built, with an ample basement for the railroad, in Springfield. While we were visiting Brian and he was telling us this story, he handed us a write up that his father made about the layout. Let's move on to that and hear some of the story in his words.

**Words From Brian's Father**

Welcome to the Central California Railroad; like most model railroads it is a work in progress. That said, it should be acknowledged that the work has been in progress for nearly two decades. However, there was something of a "hiatus" of much of one decade as "family matters" took precedence over railroad construction. The visitors should understand that the CCRR is very much a family effort in which my two sons, Brian and Timothy, and my wife, Carolyn, have made very significant contributions.

The basic structure of the railroad is modular such that should it ever come to pass (Heaven Forbid) it could be taken up and moved elsewhere and then fitted back together essentially as you see it now. My youngest son, Timm, constructed most of the early bench work during the summer of 1988, the year he graduated from college. He came home to "money up" by working in local construction and found time to start our construction in our basement. The lighting system is also Timm's work. Not only did Timm construct the lighting fascia, but also the triangular mounts for the individual lights which you can readily see. Following construction of the bench work, Brian largely added the uprights to create the false-walls which divide the railroad to create the labyrinth design. With some assistance from his Dad, Brian also attached the Masonite to establish the backdrop. Brian painted the backdrop and, with his airbrush, added the clouds taking care to use a variety of cloud structures to yield the impression of moving from area to area.


*This block of buildings is nicely done. The different colors of the bricks and small details give you the feeling that these were built at different times. They were done with resin kits from Pine Canyon Scale Models and the bit of irregularity in flatness is very convincing. The color tones of the rock in the ballast are also a nice touch.*


*A typical scene in the central valley. Note the mix of palm and pine trees, as well as, the eucalyptus trees painted on the backdrop. All of these are common in the area.*


*This photo backdrop of Lodi is just right and very convincing. Dan could not get over how nice the grass looked. Notice the color variation in the fore ground. This was all done with static grass. Brian said the trick is to mix different colors in small batches as you are putting it down.*


*If you model the central valley of California, you need to have a winery. And yes, they are big complexes like this today. It looks like this complex also makes other products from the wine like vinegar.*


*This scene of the railroad running down the street is a hold over from the Central California Traction layout they had in Carbondale. Notice the different trees again. The mix of pine and palm is common in the central valley.*

*The south end of the central valley has a lot of orange groves. When they made one on the layout, they made a big one to give the feel of the groves in California. Note the grass again and the lighting. There are some nice tone variations in the grass, and the direct lighting makes the trees cast a shadow. If you lived in California, this scene would remind you of home.*

*Brian said they made and glued all the oranges on the trees one at a time. Notice the oranges in the grass.*


*No trip is complete without a stop at a farm stand for some fresh oranges. Notice the field in the back with the irrigation rig on it. All these details tell you that this is not only a model railroad, but also a remembrance of the past.*


*The diesel house is a Lehigh Valley Models kit that Brian said is still available today. The sanding tower is from Overland Models. Notice the nice grass work again. The variations in color, height, and texture make for a nice scene. Notice that it is not all random. Grass and weed seeds tend to drop close to the parent plant and you get heavy concentrations of that grass of weed.*


*The steam locomotive facilities. Note how the tracks from the turntable line up with the backdrop roundhouse tracks. The interesting thing here is that Brian, the son, is interested in the steam and the father was interested in the diesel.*


*Brian scratch built this trailer crane from styrene. He scaled up the hook details from the Walthers HO version, and built the rest of the framework from styrene shapes. The cab, wheels, and diesel power pack were sourced from an 1/64 scale Ertl diecast grader.*

There are three circuits in the overhead lighting system that goes around the railroad; each circuit is designed to take a maximum of 1000 watts. A fourth circuit supplies electricity to the lighting above the diesel house and yard. In the lighting we employed standard florescent lamp fixtures. The florescent tubes are encased in special tubes designed to screen out the UV light. For the lighting system around the railroad, we decided to use a "stage lighting" concept with numerous light bulbs spaced inches apart. After some experimentation, we decided that the "multiple sun" problem arising from the numerous light bulbs used was insignificant when the lighting was high and the bench work was narrow. The great advantage of many light sources is that one can readily increase or decrease the light intensity on any given section or scene merely by using bulbs of a greater or lesser wattage. Initially 40 watt incandescent bulbs were standard to be used everywhere except in those sections that required diminished light intensity where 25 watt incandescent bulbs were used. To increase light intensity, 60 watt bulbs were mixed in with the 40 watt bulbs in a trial and error process until the desired lighting was achieved. More recently Condensed Florescent Light bulbs have been gradually substituted as the incandescents have burned out. Early production of CFLs did not provide a range of wattages that permitted us to vary the intensity of the lighting in different sections. More recent production of CFLs has begun to provide a range of the wattages suitable to our purposes of adjusting light intensity by merely changing bulbs.

Now for a bit of history. Following our move from Syracuse, NY, in late 1973 I set about trying to find a prototype railroad to use as a guide for creating a new model railroad. I settled on the Central California Traction Line, which, despite it's name was never a traction line, because a) it was small and could fit in the spare room we had in our new home in Carbondale, Illinois. And b) it had only two second hand locomotives making it relatively less expensive to create, and c) it served all the industries that I would want to include in modeling the railroading in Central California and d) at the time it was jointly owned by the Western Pacific,

Union Pacific, and ATSF; hence it would be entirely reasonable to expect to see trains of those railroads traveling across the rails of CCT. With that decision, a track plan soon followed and construction was begun. In the course of time, it came to feel that short-line operation, lacking serious mainline running, was too confining. Moreover, it did not permit significant inclusion of the two dominant railroads of my childhood, namely SP and ATSF. Accordingly, when asked to move from Carbondale to Springfield (by the School of Medicine), I decided that our next house had to have a highly suitable space for developing a major S Scale railroad. After shopping many existing homes, Carolyn and I decided that we really needed to build the house that we wanted. With that accomplished, I set about redesigning the CCT track plan to include mainline running between Calwa and Sacramento, following in some degree the ATSF line between those two points. That became the Central California Railroad that you are visiting today.

As we developed our concept, it became apparent (to me!) that I was unable to resolve the essential conflict of having two mainline prototypes determining the dominant motive power. I ultimately decided not to try to resolve the conflict by having the diesel fleet be entirely representative of ATSF and to have the steam fleet entirely reflective of SP. That of course led to two different sets of railcars, one characteristic of the steam era, and the other of modern diesels. Accordingly, the CCRR has no time period as such, though the scenery is mostly reflective of the last quarter of the 20th century. To answer a question; no we have no problems with operating steam and diesel together.

That was written by Brian's father as a handout to visitors. He passed away a in 2012. Today Brian lives in the house, with his teenage son, helping to take care of his mother Carolyn. Timm now lives in California. It's mostly Brian who keeps adding to the layout these days. Besides working, raising a teenager, and taking care of his mother, Brian has purchased some computer controlled machinery and is working with that to produce train models. This is definitely a full plate, but he still works on the railroad almost every weekend and runs the trains a little. Dan and I had a good visit and really enjoyed the layout. I spent some time with Brian talking about his new ventures while Dan took the photos. On the way back to Dan's house, we kept talking about some of the scenery ideas we had seen. This was a good day and a fun visit.

Questions or comments?

E-mail us here.

Attention manufactures, importers, distributors and the like!

Send us your news items for publication in the next *S Scale Resource*! For information contact Glenn Guerra, glenn@sscaleresource.com.

THE O RESOURCE
NEWS, REVIEWS, INFORMATION TO USE
SCALE

If you did not already know, we also publish *The O Scale Resource*. Now,why would we bring this up in an S Scale magazine? Well, there are a lot of non scale specific articles dealing with scenery, DCC, cars and other plans.

Painting Railroad Cars, The first of a three part series on painting prototypes and models began in the September/October 2013 issue. Also in that issue was Amps is Amps, a few simple steps for determining amperage load of your motive power for decoder installs.

The November/December 2013 issue included an article called JMRI for DCC Control using the JMRI program for easy DCC programing

In the July-August 2014 issue we looked at adding locomotive lighting using MV lenses.

Have you ever thought about using real glass for your locomotives, cabooses or buildings? If so, Getting Glassy, Glass Cutting for Modeling in the September/October 2014 issue will be a must read. Not only do we walk you through all you need, but also show you how we do it with an on-line video!

Our November/December 2014 issue featured an article on Weathering Steam Locomotives, some insight from two masters.

The article, Wabash Turntable, a look at how a turntable is built including plans appears in the January-February 2015 issue of *The O Scale Resource*.

Check out all our back issues here, and maybe even sign up for notification of the newest issues as they become available. You just might pick up tips on your modeling and layouts. If nothing else, the price is right!


By Glenn Guerra

On the way home from the Spring S Spree in Dayton, Ohio, I passed a string of brand new bulk hopper cars on the Kankakee Beaverville and Southern Railroad just south of Donovan, Illinois. This is the old Big Four main line from Cincinnati, Ohio to Chicago. The cars looked interesting so I stopped to take some photos. There were around 50 of them, and they were all new, having been built in April of 2015. The cars were built by National Steel Car of Hamilton, Ontario, Canada. These types of cars are for heavy bulk commodities like sand, roof granules, or cement. While taking the photos, I tried to get some detail photos of the lettering. Most of it is block lettering with no serifs on the letters. This could easily be done with decals or dry transfer lettering sets. There are some other details that show up when the cars are new, but are lost after they are in service for a while. I don't think these cars have ever had a load in them. Take a look, it may give you some ideas.


*This side view shows the general layout of the lettering on the cars. Much of this could be done with lettering sets. I don't think these cars have ever had a load in them. The Kankakee Beaverville and Southern stores a lot of cars, and I wonder if these cars are in storage for a while until the service they were purchased for comes online.*


*The cars are all welded construction and could probably be scratch built out of styrene. Notice the color of the wheels. The couplers and wheels are not painted, but are a natural rust color. This is a nice touch that we can emulate on our models.*


*The lettering is all done with simple block lettering, which could be had as decals or dry transfers in alphabet sets. There is very little detail around the door openings on these cars.*


*Notice the car identification box under the "treadguard" lettering. These boxes house some electric circuits that transmit the car number to line side receivers for tracking the location of cars. This is a nice detail to add to a modern car.*


*Here are some details of the ends of the cars. Note that the brake wheel and gear box are painted black. This is another detail that could be done to a ready to run car.*


*This is the A end of the cars. Notice the lettering on the ends. The brake dead lever is located on this end of the car. The brake rod runs the length of the car in a tunnel just above the center sill. Notice the natural rust color of the wheels, axles, and couplers – not all parts are painted.*


*Here is the B end of the car. Notice the black brake wheel and gear housing and the red tip on the cut lever and the air line valve. The brake rod to the other end of the car runs in a tunnel just above the center sill. The hole in the end support, just above the coupler, is to feed the brake rod through.*

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## Pre Owned


This Milwaukee SD-10 was photographed at the White Water Valley Railroad in Connersville, Indiana on the way home from the Spring S Spree in Dayton. The Milwaukee Road rebuilt SD-7's and SD-9's into SD-10's. The Milwaukee SD-7's were the first SD-7's, and some of the development work was done at Crivets, Wisconsin. The Milwaukee units were the lightest engines and had the small fuel tanks to keep weight down. This would be an interesting kit bash project.


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