

RPO

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RPO

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Editor: John Carty

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On The Cover

*photo courtesy of the Illinois Traction
Historical Society "Flyer"*

One of three styles of center-entry cars used on the East St. Louis & Suburban. Modeling article starts on page 16.

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Superintendent's Desk

by Jimmy Ables

Hello everyone, I hope all of you had a great summer. So now that summer is almost over it's time to get back to running trains, building models, and working on our layouts. Personally, I'm looking forward to the end of yard work season.

I'm going to apologize up front, my job has been very demanding the past few weeks so I've not had a lot of time to work on this column. I work for Jacobs Technologies, as a business systems analyst. I'm under contract to U.S. Transportation Command at Scott AFB and I'm responsible for planning communications support for deployed operations. Ok what does that mean, well when a hurricane takes out everything (e.g., communications systems, cell phone networks, electrical power grids, etc.) the folks deploying to help with recovery need bring their own

communications systems with them. I do the satellite communications and network planning to make sure they have access to telephones and internet like services. As you can imagine I've been very busy these past few weeks.

Enough about me, this quarter I'd like to focus on service to the organization. In my past two columns, I've told you about some of our most devoted and helpful members. Now I'd like to ask you to consider getting more involved. So how can you get more involved, well we our annual officer elections, fall meet, and annual holiday party coming up. Officer positions open are Superintendent (President), Assistant Superintendent (Vice President), Clerk (Secretary), and Paymaster (Treasure). If you're interested in running for office contact a member of the nominations/elections committee or an officer.

Rich Velten is organizing the Fall Meet for the third year in a row, before him Hank did it for years. We need someone to step forward to take on next year's Fall Meet. Bill Linson is doing the holiday party for the second year in a row. Both Rich and Bill do a lot of other things for the Division.

We've had good many activities throughout the years and in last year's survey many of you said you'd like to see more activities. A couple of people have been responsible for orchestrating those activities. The most active is Ron Gawedzinski. It takes some work to put together things such as the Fall Meet, railroad tours, layout tours, and quarterly operation sessions. We need people to identify places to go and things to do and take the lead to make it happen. The officers can't do it all and we can't continue to depend on the same small group of volunteers. If you want a dynamic and active organization then

you're going to have to step forward and help out.

After a time, people wear down or become disheartened because no one steps forward to help them. I fear we are reaching that point now. Fewer and fewer activities are going on and we practically have to beg people to help with anything other than a train show. If this organization is to survive and grow we need more members to step up and help.

I urge all of you to consider getting more involved.

That's it for this month. I hope to see you soon at a monthly meeting.

Regards,
Jim

Under the Wire

by John Carty, Editor

Autumn has arrived. Yard work morphs from maintenance to cleaning up after shedding vegetation. School and dance classes are in full swing. Cooler weather leads to more train time, hopefully. I find myself behind schedule more so than usual, primarily due to an eventful year. Not particularly good events, but events all the same. Hopefully, next year will provide more sanity.

The Fall Meet is just around the corner. Be sure to volunteer, attend, and take part in the contest. I have found the event enjoyable and enlightening each year that I attended. I have found the contest to be a great opportunity to share and receive feedback on my efforts over the past year. I guess you could say that I see the contest as primarily a social event rather than a competitive event. I like to have my models judged so I can see how I have improved and where to improve.

I have a two-year-old daughter who has discovered Thomas the Tank Engine. In watching episodes with her, the power of whimsy has reaffirmed its hold on me. Many model railroaders strive to replicate the world in all of its dirt, glory, and wart. The modeled setting of Thomas and Friends reflects the very real world of railroading, replete with weathering, soot, grime, and danger. Juxtaposed against this reality the viewer finds engines which anthropologically personify the very real character and variations between various locomotives and rolling stock. These personifications in turn allow for great story telling which captivates viewers.

Model railroads provide a stage where the actors, in the form of motive power and rolling stock perform often intricately in a manner akin to ballet. Even when creating the world around us in minute detail, we should never forget that we are having fun. Simple touches like a monkey in the company of a man in the yellow hat, a white beagle with boy in zig zagged striped shirt, a little red headed girl, a dinosaur, a bear stuffed with fluff, or even some silly name should not be forgone in the modeling efforts. Children and adults both enjoy such touches which draw visitors deeper into the stories we tell. Since these stories are what really draw people into the world we create, such extravagances should not be neglected.

I cannot take credit for Bailey's attraction to choo choos, but I can certainly use whimsy and humor to cultivate this attraction.

Until next time.

John Carty

Director's Reflections

By Jon Marx

The October issue of *Trains* had an interesting column by Brian Solomon on page 16 titled *They Call Us What?* Mr. Solomon talks about some of the names used by non-enthusiasts to refer to Railroad Enthusiasts (most polite name). He lists rail buffs, or buffs, railnut or train nut, certified train nut (we're certifiable??), and Goob (for goober? That's a peanut, and I don't like peanuts, except on the comics page). I have used Ferroequinologist (sounds sophisticated) when asked what my hobbies are. The British use train spotter (sounds like something out of WWII and the Cold War era. My mother was a civilian plane spotter in the 1950s. One I have heard professional railroaders use is Gerf, for Glassy-eyed Rail Fans. When a friend and I were at Valley Junction a couple of years ago, we heard on the scanner, "Hey, there's a guy out here with a camera. Should I moon him?" Obviously not from a fan in the yard. And how did a fan get past security to get in the yard, anyhow?

Be kind to us. Realistically, we enthusiasts are, potentially, another set of eyes to check for safety situations that should be reported. As a volunteer at Kirkwood Amtrak Station, I see all kinds of rail fans armed with cameras and scanners, photographing any and every train that passes by. A couple of years ago during one of my shifts a local news personality came in to say they wanted to include Kirkwood Station in some promotional footage they were shooting around the St. Louis area to let viewers know about expanded news programming on that channel. He noticed the rail fans sitting at one end of the station and asked about them. As I explained, I could see that he sensed "story." Sure enough, later he was talking to them and by the end of the week his story aired.

I have in my library a copy of *A Treasury of Railroad Folklore*, edited by B. A.

Botkin and Alvin F. Harlow (1953). I lifted the following from that book. It sort of sums thing up for me, although we seem to get a few “interesting characters” at Kirkwood, attracted by the trains.

“I like trains! The human race has been going to pieces on me pretty fast lately. On the whole, I think we are a sad and sorry sight. But trains are a human institution, and they are pretty nearly perfect, and they restore to some extent my esteem for the mankind who made them. I like the kind of people who run trains. There always seems to be something trustworthy and fatherly in a railroad engineer or the conductor who punches your ticket. Railroads, being regular, seem to attract regular people . . . not crackpots.”

I hope everyone saw the September issue of NMRA Magazine. On page 11 is an announcement of some new benefits available to NMRA members. President Getz had hinted at them during his presentation in Iowa. He credited VP Gerry Leone with working these out for us. The association is continuing to work to expand benefits available to members and make get more value for your dues dollar. Included this time are Logic Rail, Green Frog, Catz Paw, Model Rectifier, Micro-Mark, Rusty Stumps, and Magic Water. Discounts are accessed only through the “Members Only” page of the NMRA web site. If these products are of interest, please patronize these vendors. This will help convince others that this is a good program to participate in and will join in to bring us more savings. Other organizations have similar programs ans discounts for their members, but I find them to be not very useful to me. I don't rent a car very often, which seems to be a major perk with other organizations. These, through

the NMRA will be more appropriate for model railroaders.

During his presentation Charlie related a story from Tony Koester wherein Tony had some model railroader visitors and a couple did not agree that the NMRA was beneficial to modelers. Tony's response was: “Stop!! Wait a minute!” The NMRA has made a lot of contributions to the hobby. For example, if you like being able to purchase equipment without having to be concerned whether it will run with your other equipment, thank the NMRA. The NMRA established the standards used by manufacturers when designing products. Model railroading has compatibility between products and manufacturers not available to products in other areas, such as Silicon Valley products. When DCC was first being discussed, I recall the articles in NMRA publications about how the NMRA was working to establish compatibility standards so modelers would have a choice between vendors. LCC is being done the same way. As new concepts and products appear, the NMRA will be there to help set standards for it. It makes goo business sense to follow industry standards. Everybody gains. Unfortunately, these are relatively intangible benefits of membership and probably not easily used to sell a prospective member on joining. But, model railroaders would definitely recognize the benefit if it were suddenly removed. What happens behind the scenes is, in many ways as important as what we can see happening. On a personal note, I recently received my certificate for 50 years of membership. I do not regret it.

In closing, here is a link to a humorous look at model railroading:
<https://www.youtube.com/watch?v=GewMX2qmqmHI&t=13s>

Jon Marx

Chicago & Illinois Midland Home Shop-Built Sand Car #2002

by line David C. Lowell

As chronicled on page 125 of the publication *CHICAGO & ILLINOIS MIDLAND RAILWAY In Color* by Ryan Crawford & James E. Lewnard, the C&IM converted three of their 50 ton coal hoppers into sand cars starting in the fall of 1957. After the cars' rebuilds were completed in the C&IM's home shops, the sand cars were then painted in a green livery to match the new fleet of diesel locomotives which had arrived on the property in November 1955. The sand cars all sported The CIM's signature horizontal red stripe, the modernized yellow, black and red heralds of the diesel era as well as all the requisite ARA reporting data. The rebuilds consisted of enclosing the existing cars by adding a roof, 6 round hatches in the new roof for loading of sand into the cars, reconditioned 70-ton trucks, new hopper bottoms with air slide liners, a roof walk and quick connect couplers for both sand and air hoses. These sand cars were assigned the numbers 2001, 2002 and 2005.

These sand cars were sharp looking and unique cars. As a result, I thought they would look good on my pike. It also seemed like a great kit bash project that could be accomplished inexpensively by both upcycling some cars out of a \$5 bin at a train show while also making use of some leftover decals. So, at a train show I spent some time rooting through the myriad cars available to see what I thought would work. I ended up choosing a 34' two-bay offset hopper which I felt would best match the C&IM's 6000 series hoppers with their 2230 cu.ft. capacity. The 6000 series was a square end car, but I elected instead to use a car with an offset end because it already had a partial gable at each end. These types of hoppers are ubiquitous and inexpensive. The next candidate to be incorporated into this Franken-car was a covered cement hopper. Its contribution was slated to be its roof and hatches or so I thought. More on this later. I picked up two of each type of car in case I butchered something beyond usefulness. A good plan as it turned out. Once home I set everything out on the RIP track where they awaited their time under the knife (**Picture A**).



Picture A. The three cars that were parted out to make the Franken-car sit on the RIP track. Once I was ready to start on the sand car, I retrieved all of my C&IM reference materials related to them and reviewed the various photos of the sand cars one more time. As I studied the pictures it appeared to me that each car was slightly different. This may have been a result of being home shop built with limited or no pre-engineering due to the limited quantity of the build or perhaps the lessons learned with each successive car

was then applied to the next. I also noticed that there were a couple of paint schemes to choose from. I opted to replicate car 2002 based on a picture I located on line. I deduced it was taken sometime after 1967 because it had an ACI label. ACI stands for Automatic Car Identification which was an early experiment in bar codes for tracking rolling stock by the railroads. This particular system with colored bars was utilized from 1967 through 1977. This identifying detail worked out well because I also wanted to use the sand car in conjunction with an EMD SD-18 for some photos. The post 1967 version would work nicely because the SD-18s had arrived on the railway in 1960. I had recently crafted my SD-18 from the forced marriage of an SD-9 and a Geep 20, but that's a story for another time.

I pulled the offset end hopper and cement car from the RIP track and put them on my workbench which I refer to as LowellCoMotive Works or LCMX. After examining the offset end hopper more carefully and comparing it to the photos I realized I already had a problem (opportunity) and I hadn't even started. Upon this closer inspection of the offset end hopper I found it contained a continuous center beam running its full length like a keel. This split the lower hoppers and made them useless for what I needed. Not to worry, I pulled out a box of cars that I had received from various sources over the years and voila! I found a car that would fit the bill. A pink ACF grain car lettered for KLEEME COOP GRAIN with slot hatches and full width hoppers. I was back in business.

The cement car roof was a bit too long and a bit too wide. Therefore, I determined it would be just as easy to make a new roof section to the exact size needed from some .080 styrene sheet stock as it would be to chop up the existing roof. I cut the new roof from a single piece of .080 sheet styrene material then scored it longitudinally down the center to make a crisp ridgeline when bent. I glued stops inside the sand car body to seat the roof flush with the existing top rail on the sand car. I carefully adjusted the bend at the score to get the correct crown needed without over fatiguing the styrene material and causing it to crack all the way through. I then glued it in place against the inside of the car on the stops. I then puttied the edges, the crevice at the top and any imperfections to clean up the roof.

Next, I tried to carefully remove the existing hatch throats from the roof of the cement car with a sharp chisel blade after popping all the hatch lids off to avoid damaging them. However, I just couldn't get the throats off without damage due to their limited height. Not to worry, I came up with a Plan B. I would measure the inside diameter of the hatch lids, get a piece of plastic tube with the same outside diameter (OD) as the inside diameter (ID) of the hatch lids, cut the tube to a short length, push it up through the new holes drilled in the .080 sheet styrene and pop the hatch covers back on. The only problem with that plan was I didn't get around to drilling the holes in the .080 styrene sheets until I had already glued the roof sheets onto the sand car, puttied and sanded it. Why you ask did I do such a knuckleheaded thing? Well, two-fold, and neither one is really a good answer.

I was on a roll building away so I kept going, finding most of what I needed in my scrap pile like any prototype shop man would. However, the 15/32" OD plastic pipe was going to take a special trip to the hobby store or maybe even a special order. I was impatient and didn't want to wait. That was mistake number one; don't get over anxious. Work through the build in the right sequence and if you need something to stay on sequence, wait until it arrives. Mistake number two, using my DeWalt 18V cordless drill (UGH!

UGH! UGH! more power!) with a 15/32" twist drill to drill the hole in the .080 sheet styrene material. Yeah, I can hear a bunch of you snickering already. And yes, I did drill a pilot hole. However, in the end, that made no difference. My confession for mistake number two goes like this: My name is David and I thought I could make the wrong tool work for this job. I deftly drilled away at the roof of the sand car, careful not to apply too much pressure, as the cutting edge of the twist drill scoured its way through the material. All was going well. I was coordinated enough to not let it.....OH RATS! BITE TOO DEEP! And bite it did. It yanked the sheet styrene material out of flat and crinkled it like aluminum foil. It also popped every glued seam on the roof as well as all the putty work between the roof and the sand car's walls. It also ripped the car out of my hand and sent it flying with a crash onto the concrete floor. When it hit, other freshly attached parts snapped off and scattered all over the floor. Suffices to say there was great sorrow and some choice expletives uttered like any good shop man worth his weight would. So, as foreshadowed above, it was time to fall back to the replacement players.

Several days later, it may have even been a week, after I'd uttered the pledge to never model again had sufficiently faded to allow for plausible deniability as to the exact wording I was ready to get back at it. My resolve to get back to LCMX was undaunted even after an, "Are you sure you're ready so soon", was floated in my direction (with heavy sarcasm) from my wife.

This time I decided to rework the cement car's roof in lieu of making one. I started by deconstructing the replacement cement car carefully. The roof popped right off. The hatch lids popped right off as well. So far so good. The cement hopper had four hatches per side and the sand car would only need three (always easier to need less). With the hatch lids already removed and reserved I cut all the hatch throats flush with the top of the roof. I then turned my attention to getting the roof from the cement hopper to fit onto the sand car. The roof from the cement hopper was a bit wider and longer than the sand car. I wanted the roof to sit down inside the sand car's cargo area and be flush with the existing top rail of the hopper. This required trimming of the cement car's roof. (**Picture B**). Along the long sides there was already an existing groove molded in that when cut along on both sides resulted in the roof being the appropriate width. It was very easy to simply put a straight edge along this existing line and trim off the excess. Next, I trimmed the two short ends which I accidentally overcut by just a hair leaving the roof just a touch short. The gap was nothing a little Squadron Putty couldn't fill. After that it was time to reset the hatches. As I had learned in my first attempt, trying to make six large holes might prove problematic. So, I turned to another car retired from revenue service.



Picture B. Stripping down the top

Picture C. Salvaged hatch



As it so happened one of the cars that I had on my RIP track just for show held the answer. That car had 10 roof top hatches of the style I wanted with just a little higher rise to their throats. I removed the roof of this car and cut the hatches free from of the roof material with nippers. Next, I trimmed and sanded them so they could be surface applied to the sand car's roof. Once they had been reworked and were ready for assembly I set them aside. **(Picture C)**.

As referenced earlier, the trimmed roof was set to approximately the right size **(Picture D)**. But prior to installing



Picture D. Starting to mock up the parts

Picture E. Infilling the old holes



the new hatches the old holes needed to be filled in. This was accomplished by gluing some scrap styrene on the underside of the old holes and then filling the holes with putty **(Picture E)**. This took several rounds of filling and sanding to make sure they were full and sanded flush because the putty shrinks just a bit as it dries. With the holes

filled in, I then measured, calculated and laid out the locations of the six new hatches. Centering the hatches at the intersections of the two longitudinal and three transverse lines I glued each of them into place. With the top structure almost completed, it was time to start work out the underside of the car. **(Picture F)**



Picture F. The new hatches on the roof and the new silos under the car.

Prior to closing up the car it's important any added weight be installed to meet the NMRA recommended practices. Applying the lesson previously learned about rushing ahead and working out of order, I took a pause and worked out the car's weight completely before moving on. I took all the loose components including the trucks, wheel sets and couplers and placed them all on the scale. The pile of components came up a bit light. I grabbed two of the weights from the bottom of the pink KLEMME COOP GRAIN hopper's silos that were grafted onto the sand hopper. This was an obvious choice because the weights were already a natural fit. I added them to the scale as well. Nope, still a few ounces short. I then supplemented the pile with some $\frac{1}{4}$ oz. weights until it hit the magic number. All that resolved it was then time to get back to the modifications.

The underside of the car required a bit more deconstruction before reconstruction could occur. Basically, I cut the hopper chutes off level with the bottom edge sills. This left just the transverse beam where the two chutes met in the center. I then removed the angled portion back toward each end until the hoppers from the Pink KLEMME COOP GRAIN car would marry up with this car **(Picture G)**. The recipient car sufficiently cut back, I

mounted the two new silo bottoms (**Picture H-1**) into the frame of the hopper and secured them with some styrene splices on the interior (**Picture H-2**) as well as gluing the butt joints. Some putty work was required to clean things up and seal up the car. I subscribe to “out of sight out of mind” and therefore, do not put a lot of effort into the underside of my cars.



Picture G. Gutting the bottom of the car like a bass.



Picture H-1. The silos, after they came free from the first attempt debacle and prior to install in the second attempt



Picture H-2 Securing the silos and weighting the car

With the underside pretty well wrapped up, I turned my attention back to the car body. I added new vertical bolt plates and rivets on the car sides (**Picture I**). While doing that I realized I'd damaged some of the cast on rivets along the bottom sill as well as where the hopper bottom joined the side sheets. So I sanded off all of the remaining rivets and replaced them with new ones using more of the water slide rivets I'd used previously on the new bolt plates. I then cut off the cast-on ladders and added some new ones. A couple of the stirrups had been damaged so I fixed those as well.



Picture I. Added bolt plates decal rivets

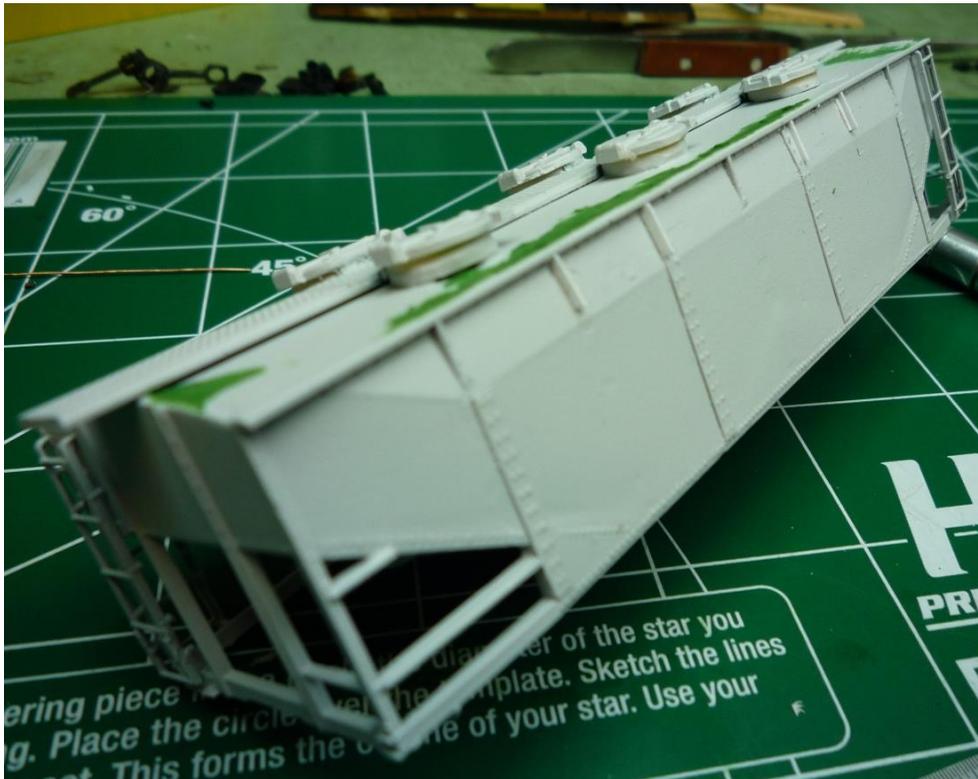
I cut new wedge-shaped angle pieces to form the small gussets below the top rail on each of the long sides of the sand car at the offsets to match the prototype layout. This was one of the biggest differences between each of the prototype sand cars. The number and layout of these small gussets along the top rail was unique to each car. Then to wrap up the major details, I modified a piece of roof walk from one of the donor cars and re-attached it to the top of the car along with support angles at each end's overhang.



Picture J. Primed and ready for inspection

With all the physical modifications completed I moved to the finishing process; the preparation for painting, decals and the final seal coat. I started by thoroughly washing the car and then let it dry overnight. I primed it by airbrush with Grey Vallejo Surface Primer (**Picture J**) and let that dry for a couple of days. After the primer had cured, I examined the car and tweaked the putty work at a few locations (**Picture K**). At a few locations I left the putty a little rough in an effort to leave a mock patina representative

of the car's previous life. The overall affect was that of a utilitarian rebuild in the home shops where not every imperfection was worked out. Once I was satisfied with that outcome I shot it again with primer and let it cure for a further couple of days.



Picture K. Putty repairs

This car was a pretty straightforward one-color paint job. I used C&M green which I used on my locomotives and cabooses as well. It is a rich color so it covers quite well in one coat. Once painted and allowed to cure for several days I applied a gloss clear coat to provide a base for the decals. This clear coat was also given several days to fully cure. While the clear coat was curing I sifted through my decal pile and cobbled together enough leftovers from other cars and locomotives to get all the decals I needed. The only thing I did not have were the ACI decals. I found some Microscale Decals on line and ordered them. As a result, I now have enough of these post-1967 ACI decals to last my lifetime since I typically model mid-1950s.

Like the painting, the decaling was a multi-work session event. On the first evening I placed the car in a foam cradle and then decaled one side and one end of the car which also including applying Solvaset after the decals were on the car to get the decals to snug down nice and tight across the car's surface and any raised details. The next evening, I repeated this process on the other side and end after the first side had been given 24 hours to dry. This greatly reduced the chance of damage to the first side by

trying to accomplish too much at one sitting. I applied the decals and worked them into final position with just the water they brought with them from the bowl. On occasion a drop of water needed to be added to get a decal to “float” on the surface. I have a coffee cup warmer that I set on low and put a jelly jar lid with about 1/4” of water in it on the warmer. The warm water quickly activated the glue especially on cold winter evenings in the basement. After I applied a decal and had nudged it into its final position I liberally applied Solvaset at the top edge of the decal. This allowed the capillary action and gravity to draw the Solvaset under the decal. I then took the edge of a torn paper towel and gently touched it to the bottom edge of the decal. The torn edge produces many minute fibers that make it more ideal to soak up liquid than a cleanly cut edge. I touch the bottom edge of the decal just hard enough to get the paper towel to take up the moisture but light enough not to move the decal. You know you’ve done it correctly when the ragged edge of the towel wicks away all remaining water and the excess Solvaset from behind the decals. This caused the decal to lay flattened tight against the surface including any raised details without air bubbles.

After that all it took was a couple more days of cure time to make sure everything was set. A final clear dull coat of finish ended the major painting process. While that cured, I hand painted the trucks and wheel sets. I then weathered the trucks. Recently I’ve started using Pan Pastels to do the weathering. I like how easily they apply as well as their final look. I also painted the coupler pockets, couplers and glad hands to look like air hoses by using oily black for the rubber and silver for the galvanized fittings. Lastly, I dug through my parts bins and found a couple of random parts to represent the sand and air line connections and affixed them under the bottom of the silos. The project was complete and ready for my layout (**Picture L**). Highball!



Picture L. In service

Volunteers Needed!

The Gateway Division Fall Meet will be held, Saturday, November 4, 2017, at Trinity Lutheran Church.

This event requires many hands. Please join in by volunteering to help.

On Friday, November 3, we will set up the venue.

Please join in helping set up tables and chairs for:

Vendor Room (Gym)

Contest area

Clinic Room

On Saturday, November 4, from 8 am until close:

Assistance needed for last minute set up

Attend the Welcome Desk and collect entrance fees and draw for and hand out door prizes

Assist in the contest area

Judge the contest

Operate the Division Layout

Assist when and where required

Present clinic(s) on topics of interest to the general public

Members who work the event will receive free admission

At the end of the day volunteers are needed to assist in tearing down the event and restoring the venue to its original condition.

Please contact Rich Velton (modeltrainnut@gamil.com) or Jim Ables (jim.d.ables@gmail.com) to sign up.

We are always looking for ideas for clinics and presentations. Please contact Don Ayres (ayresd1@charter.net) if you have a clinic you would like to present or an idea for a clinic.

Scratch Building Center Entry Cars for the East St. Louis & Suburban Railway

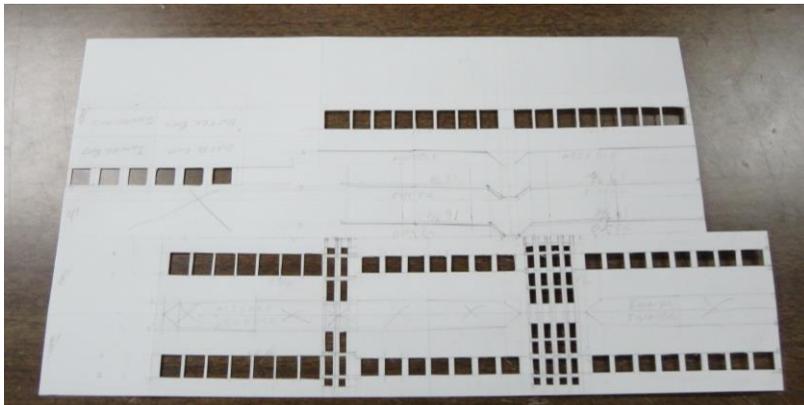
by John Carty

After finding photographs of center-entry cars converted from standard cars by the East St. Louis & Suburban in their shops, I knew I would need these for my layout. The Great East Side Electric Railway System carried three different types of center-entry cars on their roster. Two types were street cars while the third was a longer interurban car.

I started by creating drawings of each type of car from the photos. Since the photos were taken after being acquired

letter boards and rivet strip. I laid out each side, less the rivet strips and letter boards, and embossed rivets on the lower panels and rivet strips using an awl with a double layer of paper between the panel and my desk. After embossing the rivets, I cut out the openings for doors and windows. Upon completing the riveting of the panels, I cut out all of the pieces. After aligning the layers of each side, I cemented them together using Testor's liquid cement. On cars #61 and #15, I

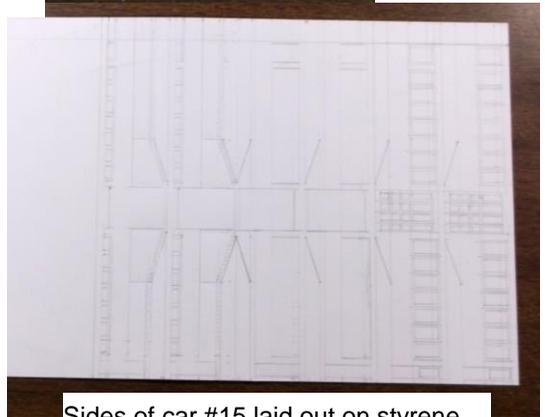
used 0.010" x 0.030" strip styrene for the window frames instead of including them with the appropriate layer as I did on car #7. Once the assemblies had dried, I used a file to



Sides of car #7 laid out on styrene.

by the Illinois Terminal, I omitted some details. I also obtained Bowser powertrains with which to power the units and created working drawings of the floors.

Construction began with the sides. Each side consists of the following layers of 0.010" styrene: the rivet strips under the windows, the lower panels along with the letter boards, the window frames and front door, and the window sashes and center doors. I used strip styrene for the



Sides of car #15 laid out on styrene.

clean them up and match up the lengths.

Next, I built the ends. I started by laying out the lower panel and windows on 0.010" sheet styrene. I shaped 0.040" x 0.125" strip styrene into forms to strengthen and maintain the shape of the curve of the lower panels and to provide a mounting point for the windows. I added strip of 0.010" x



Underside of roof for car #7.

0.060" on which I embossed rivets with an awl to the top of the lower panel. I added anti-climbers to each end consisting of 0.100" styrene channel with a strip of 0.010" x 0.015" styrene added down the length of the middle. I capped the anti-climber by angling a piece of 0.010" by 0.040" strip styrene from the top edge of the channel back to the front panel and filled the ends with putty. I added short pieces of 0.040" thick styrene to the top of the bottom brace of the end to allow me to secure the floor to the car body.

I formed the roof by laminating styrene and filing to shape, and then added mounting strips for the sides and ends. I also added reinforcements for the trolley poles, which would be added later, and pilot drilled holes for them. I then assembled the car body. I added the walk and vents to the roof. I inserted lengths of 3/64" styrene rod to serve as the classification lights.

For #7, I cut two pieces of 3/16" styrene tubing just long enough to conceal a Miniatronics 3 mm LED, attached it in the center of each the lower panel, and drilled the panel to

allow insertion of the LED from the inside of the car. For cars #15 and #61 I cut the tubing the length of the LED and then used a hobby knife to chamfer the end to fit snugly over the base of the LED, securing the diode in the tubing with Zap a Gap. Since I used the leads of the LED on both cars as part of the mounting, I drilled holes in the roof to receive them and bent them to shape per the photographs. I

also added a short length of 0.020" x 0.040" styrene to the roof near where the middle of the headlight housing would sit. I added

a three-board roof walk on each car using 0.010" x 0.060" strip styrene supporting it with 0.020" square strip styrene. Laterals were made using 0.020" x 0.040" strip styrene.

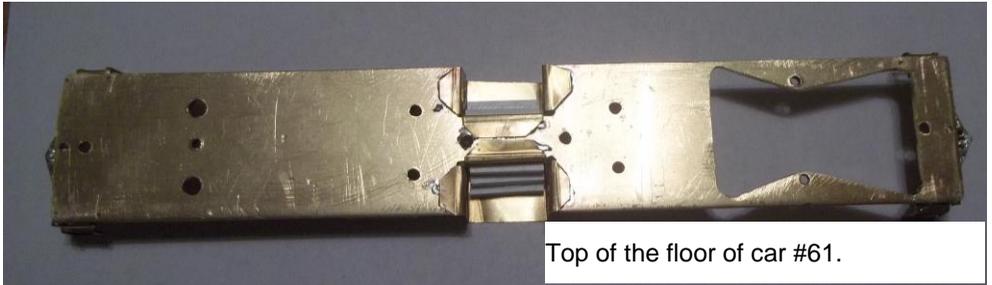
I cut drip strips from 0.010" x 0.030" strip styrene. I also cut and bent pole hooks from brass wire and secured them into holes drilled in the roof to the left of the centerline. Then I added Details West horns to each end of the roof on the side opposite the side of the hooks. I also added pole retractors at each end consisting of a small brad cut to about an eighth of an inch, inserted in a hole I drilled near the top of the lower panel, and glued to the strip reinforcing the front panel using Zap a Gap. At this time, I drilled the body and installed grab irons cut and bent from brass wire.

I laid out the floor on 1/16" thick brass. I drilled the corners of the cut outs needed to clear the drive and also drill out the holes necessary to mount the trucks and motor. Next, I cut the floor out with a band saw and motor tool and dressed the cuts with files and a

grinder. I laid out the step wells on 0.005" sheet brass, cut them out, and bent each to shape and soldered them to the floor. I made the steps inside the main doors from strip styrene and glued them in place with Zap a Gap.

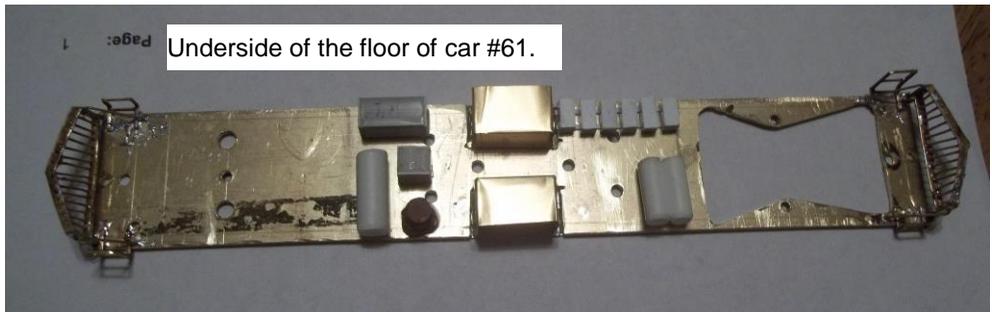
in place.

For car #7 I fabricated the fold-down steps using 0.005" sheet brass with the folding portion of each cut from a lateral scavenger from a Model Die



I cut the pilot of #7 from 0.005" sheet brass and soldered it onto supports cut from 0.015" sheet, which were then soldered to the floor. I assembled the

Casting Old-Time Caboose kit. For cars #15 and #61, I used brass ladder stock for the stirrup steps. I soldered the steps and stirrups to the frames. I



pilot of the other two cars by first laying out the two pieces of the frame on 0.015" sheet brass, drilling the holes for the spokes of the pilot with a #73 drill, and cutting out the pieces. I soldered the two pieces of the frame together and then inserted 0.015" wire for the spokes through the holes, soldering them in place. I soldered the pilots to each end, adding supports cut from 0.015" wire soldered

created the battery boxes, air tanks, and resistors by cutting and filing styrene strip, tubing, and shapes. Mounts were cut from strip styrene. Under body details were affixed with Zap A Gap.

I sprayed the bodies of both cars, as well as the yet to installed roof





mounted headlights, silver aluminum, and then masked to spray the red and blue on cars #7 and #15 and the blue on car #61. Lettering on all three cars consists of Microscale decals applied with Champ Decal Set. The striping on car #61 came from a Microscale set for Mobile gas stations. I painted the floor and side frames flat black.

After painting and lettering I drilled out the pilot holes for the bushings for the trolley poles and pressed the bushings into place. I then installed acetate in the windows and doors. I installed Bowser trolley poles on cars #7 and #61 and Eaton Custom Engineering

poles on #15 with thread added for tie downs. I also installed motor, decoder, speaker, LEDs for headlights, and the trucks. Finally, I attached the body to the floor with #0-80 screws. I also modified McHenry couplers for Rivarossi passenger cars to serve as swing coupler on #61 and secured them to the floor with #2-56 screws. I lightly weathered the street car using acrylic paints and Bragdon powders, concentrating on the roof and under frame.

I now have a trio of signature cars for the East St. Louis & Suburban.

Division Minutes

by Gregor Moe

Meeting Minutes for July 17, 2017

Jim Ables, Superintendent
Don Ayres, Assistant Superintendent
Richard Velten, Paymaster
Gregor Moe, Clerk
Jon Marx, MCoR Director
Ron Gawedzinski, Activity Coordinator
Don Ayres, Publicity Chairman

Clinic: Dale Dewitt presented his clinic on model photography.

Business Meeting:

Superintendent Jim Ables called the meeting to order. There were 28 members and 5 guests present.

Minutes of Previous Month's Meeting

Minutes from the May 2017 meeting were available for review prior to the meeting start. Minutes were approved as written.

Treasurer's Report

Rich Velten presented the May and June 2017 paymasters report. The opening June balance was \$20,472.32. During the month we had total receipts of \$271.26 and expenses of \$10.50. Our closing balance was \$20,733.08. He explained income was from sale of wheel set.

Merchandise Report

Rich Velten had the wheel sets for sale. Also on hand are NMRA standards gauges.

RPO Report

John Carty set 1 Oct for RPO dead line.

Directors Report

Jon Marx reported he'd sent out the membership report to the officers. He reported the region now has a face book page.

Achievement Program (AP) Report

There was no report as John Carty was not present.

Publicity Chair Report

Don Ayres reported that the next show we may not have a table as the show is sold out and smaller.

Outside Activities Report

Ron Gawedzinski talked about the upcoming trip to the Arbor way T.T. northwestern miniature railroad and Iron spike model railroad museum..

Old Business

The 2020 convention is in discussions with our web master on advertising the 2020 convention on the web site.

The Model Railroading 101 committee said they have the check and are going to buy the starter set. The showed a sign for the clinic and a bookmark hand out advertising the clinic.

Still looking for project manager for the layout Phil Bonzon donated to the group.

New Business

A motion to split the cost of the combined trip with the NHRS was made and passed.

Bill Linson agreed to chair the Christmas party.

Payment for the mailed notices and RPO are due.

Upcoming clinics: next month's clinic will be adding basic terrain and basic scenery to your layout by Gregor Moe.

Drawings

50/50 winner: Dave Wehner

Gift Card winner: Jim Ables

Foam Cradle from Greg Gamlick: Carl Wessel

Meeting adjourned.

Respectfully Submitted,

Gregor Moe,
Clerk, Gateway Division

Meeting Minutes for August 21, 2017

Jim Ables, Superintendent

Don Ayres, Assistant Superintendent

Richard Velten, Paymaster

Gregor Moe, Clerk

Jon Marx, MCoR Director

Ron Gawedzinski, Activity Coordinator

Don Ayres, Publicity Chairman

Clinic: Dave Roeder presented signals for model railroads.

Business Meeting:

Superintendent Don Ayres called the meeting to order. There were 14 members and one guest present.

Minutes of Previous Month's Meeting

Minutes from the July 2016 meeting were available for review prior to the meeting start. Minutes were approved as written.

Treasurer's Report

The treasurer's report for July was available for review. The opening balance was \$22,707.22. During the month we had total receipts of \$84.48 and expenses of \$177.74. Our closing balance was \$22,613.96.

Merchandise Report

We have a good supply of wheel sets on hand. Also on hand are NMRA N-gauge standards, and NMRA OO-On3 gauge standards.

RPO Report

John has set 1 October as the deadline for the fall edition submissions.

Directors Report

Jon Marx wasn't present.

Achievement Program (AP) Report

There was no report as Phil Bonzon was not present.

Publicity Chair Report

Don Ayres requested volunteers to man our table at the Boeing show.

Outside Activities Report

Ron Gawedzinski had no report.

Old Business

The 2020 convention is still tabled.

The topic of the annual banquet and options were discussed. It was decided to have the banquet at the Ballwin golf course with the division picking up the rent and the members pay for their meals.

Chris Oestreich is working on another operations session.

New Business

The fall meet was discussed and request for volunteers for set up tear down clinics and other functions. The meet is 5 November 2016.

Upcoming clinics: next month's clinic will be Jeremy Janzen on track planning.

Drawings

50/50 winner: Michelle Jobe

Gift Card winner: Michelle Jobe

Meeting adjourned.

Respectfully Submitted,

Gregor Moe,
Clerk, Gateway Division

Timetable of Events

Do you know of an event of interest to other Gateway Division members? Send the information to the editor so it can be listed in future *RPOs* and on the www.gatewaynmra.org website.

NMRA Divisions or St. Louis area clubs may have their event listed here by sending a description of the event, in the format shown here, to the Editor (rpo@gatewaynmra.org).

Sat. & Sun., October 7 & 8, 2017

27th Annual Greater St Louis Metro Area Train Show, Kirkwood Community Center, 111 S Geyer Road, Kirkwood MO,

Saturday October 27, 10am - 5pm,
Sunday October 28, 11am - 4 pm,
Admission: \$7 All kids and students with IDs are free

www:mvns.railfan.net

Sat. & Sun., October 14 & 15, 2017

Rail Road Days (Train/Show/Swap Meet/Vendors), Hosted by the Central Missouri Railroad Association, Rebecca Boone Elementary School Gymnasium, 836 South St., Truesdale, MO 63380
Rrdayswarrencomo.weebly.com

Mon., October 16, 2017

Gateway Division Meeting, VFW Hall, O'Fallon, IL, 7 p.m.

Sat., October 21, 2017

Dreamland Palace Train Show, 200 3043 State Route 156, Foster Pond, IL, 62298, 10 am - 3 pm

Admission \$3, children under 12 free

Sat., November 4, 2017

Gateway Division Fall Meet, Trinity Lutheran Church, 14088 Clayton Rd at Woods Mill Rd, Ballwin, MO, 9am - 3pm, includes Model & Photo Contest, swap meet, modular layouts, and layout tours.

Admission: \$7, Children under 12 are free

This show is sponsored by the Gateway Division and we'll be looking for your help in supporting the event.

Sun., November 5, 2017

O Gauge Layout Open House, 5901 Hampton Ave., St. Louis, MO, 10 am - 4 pm. Admission free

Sat., November 18, 2017

Toy Train Show and Swap Meet, Columbia Senior Activity Center, 1121 Business 70 East, Columbia MO, 10am - 3pm

Admission: \$4, Children under 12 free

Sat., November 18, 2017

Dupo Train Show, 200 S 5th St, Dupo, IL, 9:30am - 2 pm

Admission \$3, children under 12 free

Sat., November 18, 2017

Metro East Model Railroad Club Holiday Open House, Old Firehouse, 180 Summit St. (corner of School & Summit Sts., Glen Carbon, IL, 10 am - 3 pm. Admission free

Mon., November 20, 2017

Gateway Division Holiday Meeting, Ballwin Golf Club, 333 Holloway Rd., Ballwin, MO 63011 (West St Louis County), 6:30 p.m. \$18.50 per person. Send checks to Rich Velton, 566 Golfwood Dr., Ballwin, MO 63021.

Sat., December 2 Great St Louis Christmas Train Show and Food Drive, Immanuel Lutheran School, 9733 Olive Blvd, Olivette, MO, 9am-3pm

Admission: \$5 or \$4 dollars with donation of nonperishable food item. Children under 12 free.

Sat., December 2, 2017

Metro East Model Railroad Club Holiday Open House, Old Firehouse, 180 Summit St. (corner of School & Summit Sts., Glen Carbon, IL, 10 am - 3 pm. Admission free

Sat. & Sun., December 2 & 3, Pointsettia Express,

Sponsored by the Mississippi Valley N Scalers, Fahr Greenhouse, 8944 St. Albans Rd (Hwy. T), Wildwood, MO, Dec. 2nd 10am-4pm & Dec. 3rd 11am-4pm.

Sun., December 3, 2017

O Gauge Layout Open House, 5901 Hampton Ave., St. Louis, MO, 10 am - 4 pm. Admission free

Sat., December 16, 2017

Metro East Model Railroad Club Holiday Open House, Old Firehouse, 180 Summit St. (corner of School & Summit Sts., Glen Carbon, IL, 10 am - 3 pm. Admission free

Mon., December 18, 2017

Gateway Division Meeting, VFW Hall, O'Fallon, IL, 7 p.m.

Sat., December 30, 2017

Metro East Model Railroad Club Holiday Open House, Old Firehouse, 180 Summit St. (corner of School & Summit Sts., Glen Carbon, IL, 10 am - 3 pm. Admission free

Mon., January 15, 2018

Gateway Division Meeting, Trinity Lutheran Church, 14088 Clayton Rd, at Woods Mill Road (Hwy 141), Ballwin, MO (West St Louis County), 7 p.m.

Saturday, December 2

Great St Louis Christmas Train Show and Food Drive, Immanuel Lutheran School, 9733 Olive Blvd, Olivette, MO, 9am-3pm

Admission: \$5 or \$4 dollars with donation of nonperishable food item. Children under 12 free.

Mon., February 19, 2018

Gateway Division Meeting, VFW Hall, O'Fallon, IL, 7 p.m.

Mon., March 19, 2018

Gateway Division Meeting, Trinity Lutheran Church, 14088 Clayton Rd, at Woods Mill Road (Hwy 141), Ballwin, MO (West St Louis County), 7 p.m.

Mon., March 16, 2018

Gateway Division Meeting, VFW Hall, O'Fallon, IL, 7 p.m.

NMRA MCoR Region & Gateway Division

The National Model Railroad Association (NMRA) is a world-wide organization dedicated to all aspects of model railroading. In order to bring the most benefit to its members, the association is subdivided into Regions, and each Region has a number of local Divisions. National dues are \$72 per year, and all members of the NMRA are automatically members of the Region and Division in which they live. The Gateway Division is part of the Mid-Continent Region, which represents Missouri, Kansas, Arkansas, Oklahoma, Nebraska, and parts of Iowa and Illinois.

The Mid-Continent Region publishes a quarterly bulletin, The *Caboose Kibitzer*, and holds an annual convention meeting that usually includes modeling clinics, local tours of layouts or prototype facilities, and model contests. Annual subscription to the Mid-Continent Region *Caboose Kibitzer* is included with membership at the National level and runs concurrently.

The Gateway Division is well represented on the regional and national levels of the NMRA. Its members actively promote the modeling hobby through local monthly meetings, this quarterly newsletter, an annual train meet in the fall, participation in area train shows and other events, and a comprehensive website. Annual subscription to the Gateway Division *RPO* is \$10, running from July 1 through June 30. Members who subscribe mid-year are given extended memberships. The division's official mailing address is on the "Contact Us" page on the website: <http://www.gatewaynmra.org/gateway-nmra-contact-us/>. Checks may be sent to Gateway Division NMRA, PO Box 7742, Chesterfield, Missouri 63006-7742. Membership is open to anyone from the beginner to the most advanced modeler, of all ages, so that everyone can share questions and knowledge of the hobby. Visitors are welcome at the monthly Division meetings listed on our website, www.gatewaynmra.org

Division Officers

Superintendent

Jimmy D. Ables

Assistant Superintendent

Don Ayres

Clerk (Secretary)

Gregor Moe (Bonnie)

Paymaster (Treasurer)

Richard (Rich) M. Velten
(Marilyn)

Division Director

Jon W. Marx (Kathy)

