



RPO

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On The Cover

photos by Richard Schumacher

Best of Show Entries in the Gateway Division Fall Meet Modeling Contest: Gregor Moe's Coaling Station and Dave Roeder's SNR #67 flat car.

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Superintendent's Desk

by Tim Stout

Hello again fellow model railroaders. Happy New Year – as it is now 2014. Looking back at 2013 briefly here are some of the highlights I remember. The new website went live thanks to 300+ hours by Richard Schumacher. I also want to thank the other volunteers for helping to format data to be transferred to the new site. Brian Post is still collecting narratives about layouts to be added to the website and Dale Dewitt has been taking photos of some layouts we didn't have current photos of. If you want your layout on the website contact Brian or Dale and let them know all about it.

There was another successful joint picnic between the National Railway Historical Society and the Gateway Division NMRA at the Wabash Frisco

and Pacific Railway in Glencoe Mo. Approximately 100 persons attended despite the rain showers during the afternoon. Everyone had a good time and there was plenty of free food and drink. The food was so good we even had several non-members appear in the serving line – looks like we need to bring membership forms to the picnic for “new” members. Even though it was raining for several hours during the afternoon there were pavilions to sit under and I was still able to listen to railroad stories. The main reason for the picnic-- talking trains and railroading -- was not lost. Thanks again to Ron Gawedzinski for heading up this event, Joe Oberneufemann, the WF&P staff, and all the volunteers from both groups that helped make this possible.

Lastly the Fall Meet was another successful event that helped to raise money for our group as well as increase our profile within the community. Thanks to Hank Kraichely for spearheading this event, Dave Roeder for the layout tours, Phil Bonzon for the clinics, John Carty for the contest room and all the other volunteers and clinicians who helped with everything from setup to cleanup. This really is a group effort and I appreciate all the help. Looking forward to the next Fall Meet on November 1, 2014 being even bigger and better than this one.

During the fall meet on November 2, I



donated an old, red plastic gondola railcar as a door prize. It had plastic

wheels, horn hook couplers and low level of detail. I tend to buy more expensive models nowadays, but figured a youngster would be happy to get it. I was surprised to see Gregor Moe carrying the car I had donated around with him at the fall meet and mentioned to him I had donated it. Much to my surprise Gregor returned it to me at the holiday party on November 18, but I didn't recognize it. It is now painted reddish brown, lightly weathered, with new lettering, Kadee couplers, metal grab irons, air hoses, and metal wheels. It's a car any railroader would be proud to own. Proving that one man's junk is another man's treasure. I wish I had a before photo to go with the current photo – the transformation is remarkable. Thank You, Gregor.

Now that the holiday rush is behind us I hope to take time to read some railroading articles, play with my Christmas presents, and try my hand at making trees using a method Dave Roeder discussed in a clinic earlier this year. Interesting story – after Brenda learned about this technique – we learned that my mom has Sedum growing in her yard. She harvested bags of it for me and let it dry so we could try to make trees during Thanksgiving when we were all together. I wasn't aware of this at first – but was quite happy to learn about this during the trip to my parents. Turns out my mom had bought the wrong consistency of ground foam and we couldn't get the larger clumps to stay glued to the trees. – Not to worry – I bought some finer ground foam at a train show recently and intend to try again. Just wanted to share a story of model railroading bringing family together to try new things. That is what the hobby is about – bringing people together and creating memories.

Under the Wire

by John Carty, Editor

The holidays have arrived and passed issuing in a new year. I hope each of you reading this received items on your list (but not all, so that you still have something for which to wish). On the heels of this New Year came snow or, if you like, fourteen inches of partly cloudy.

Thank you, John Golden, for your excellent articles submitted in the last year. Additionally, thank you for the photos you sent me. Because of you, I can now revamp the car shops and powerhouse on my layout. These buildings are rather large at ninety and a hundred five feet in length respectively and present me with a nice challenge for my kit bashing and scratch building skills. Thanks again, John.

Speaking of challenges, the division's kit bashing and diorama contests also provide opportunities to try something new. Please afford yourselves the opportunity to stretch yourselves. I have never regretted partaking in such activities, even if I have sworn that I will never build another N-scale structure.

In closing I will reiterate another challenge: I am asking each member to please submit one item to the RPO this year.

Have a happy and productive new year!

In Memorium

Kevin Lee Keeler

(October 21, 1963 - December 26, 2013)

Kevin Lee Keeler, 50, Springfield, MO, passed away Thursday, December 26,



2013, in his home surrounded by his loving family. He was born October 21, 1963, in Salina, Kansas, to Ervin and Sue Keeler. He was preceded in death by his grandparents, Willard and Leta Keeler; grandfather, Harold Mort; and uncle, Monte Mort. Kevin is survived by his wife, Debbie Keeler; daughter, Ashley Keeler; stepchildren, Dalton Meyers and Brandy Dawn Freeman; parents, Ervin and Sue Keeler; siblings, Sheila Arrington and husband Robert, Justin Keeler and wife Sarah, Lori Wood and husband Darren; nephews, Nathan and Brandon Arrington; grandmother, Thelma Mort; and numerous aunts, uncles, cousins, and friends. A memorial service will be held at 1 PM, Saturday, December 28, 2013, in the Kingdom Hall of Jehovah's Witnesses, 3034 Fremont St, Springfield, MO

Kevin was a vendor and a friend. He did a lot of train shows around the Mid-Continent Region. He will be dearly missed.

Louis Seibel Division Director Turkey Creek

Gateway Division Contest Policy

by John Carty,

Division Contest Manager

The policy for eligibility of entries in the Gateway Division Annual Fall Model Contest follows. Please note that this policy has been in effect prior to my assumption of the position of Contest Manager in 2008.

All entrants must be members of the National Model Railroad Association (NMRA). The entry must be the work of the member entering it.

If a model or photo was awarded 1st place by merit judging and/or popular vote in any previous NMRA Divisional, Regional or National contest, that model

is not eligible for a Gateway Division contest. The model maybe merit judged for an AP award, but not for a contest award in either the judged or Popular vote portions of the contest.

It is the responsibility of the modeler to determine whether his or her model or

photo is eligible for a Gateway contest. If the Gateway Contest Manager determines that a model or photo entered is not eligible, then that model or photo shall be withdrawn from the contest and any awards given are forfeited.

The Gateway Division and NRHS 2013 Annual Joint Picnic

by Ron Gawedzinski

photos by Steve Binning

On Saturday, October 5, 2013, the St. Louis Chapter NRHS and the Gateway Div. NMRA held the 6th Annual Picnic of two fine train groups at the Wabash, Frisco and



Pacific Railroad, Glencoe, Missouri.

Well, it finally happened. After 5 years of nice weather the RAIN came, and what perfect timing, right when people were being served food. Fortunately it was a light to heavy drizzle at



times but no downpour and went away after a while. But our servers persevered, some with umbrellas, and people were patient. The steam locomotive rides went on, the food and drinks were plentiful and the scenery along the Meramec River was beautiful. Some new

train friends were made. But most of all people had fun in spite of the rain.

This year 106 members, families and guests from both groups attended, along with an additional 9 WF&P crewmembers.



The WF&P crew were very gracious hosts and they enjoyed having us there as much as we enjoyed being there.

This year there were 30 volunteer workers who were great in performing the many jobs at hand, even in the rain. Steve Binning, Charles Dasho, Dan Gassen, Ron Gawedzinski,



Cathy and David Graham, Bill Heger, Dr. Al Howe, David Huelsing, Joan and Tom James, Hank Kraichely, Gaylene and Dr. Richard LaBore, Dave Lyon, William Miksicek, Jean Myers, Joe Oberneufemann, Brian Post, Rich Schumacher, Andy Sisk, Rick and Neva Sprung, Lynne Stoecker, Tim Stout, Rich Velten, Eileen Weber, Dick



Wegner, Gail and Kelvin Wilke. (If I have accidentally left off your name please let me know so that I can correct my error. Ron)





A number of members of the Gateway Div. and the St. Louis Chapter donated a large amount of attendance prizes this year. Thanks to all. Everyone got a chance to win something.

The Officers' of the Gateway



Division NMRA and the St. Louis Chapter NRHS thank the members, families and guests for their attendance, their help and their donations that made this picnic

a great success. Ron especially wants to thank the above named volunteers, for without them this event could not have been held.



Finally, many thanks to the WF&P crew for making this event a success: Tom Ernst, Tom Heil, Mike Lorange, Rich Owings, Jim Scott, Dennis Smith, Kyle Timmerman, Greg Wapelhorst,

Chuck Weber.
Thanks for coming!
Ron



Three Southeastern Box Cars

by John Golden

photos by the author unless noted

Author's Comment: This article originally appeared in the Seaboard-Coast Line Modeler, Vol. 3, No. 2, 2nd Quarter 2009. The S-CL Modeler is the online modeling magazine of the Atlantic Coast Line and Seaboard Air Line Railroad Historical Society,

I recently finished three Southeastern-prototype box cars for railroads represented by the ACL & SAL Historical Society—the Georgia Railroad, the Atlanta and West Point Railroad, and the Western Railway of Alabama. These railroads were occasionally referred to as “the Georgia Roads” although they each maintained separate corporate identities until the carriers were merged into the Seaboard Coast Line in 1967. Cars like these from the Georgia Roads could be seen regularly moving freight on the Atlantic Coast Line and Seaboard Railroads as well as all over the United States into the 1970s.

Georgia Railroad 19899



Photo 1. The Sunshine Models War Emergency 40-foot box car, finished for the Georgia Railroad.

Georgia Railroad took delivery of 100 “war emergency” 1937-design AAR box cars in January, 1944. The cars were so-labeled “war emergency” because they used composite construction, replacing the steel sides with wood sides sheathed with steel structural members and doors. The Georgia Railroad cars featured Miner brake wheels, Apex Tri-Lok running boards and ARA trucks, and were painted freight car brown with black roof, ends, trucks and underframe.

The model is Sunshine Models HO scale kit #29.4 initially released in 1994. The sides, ends, and underframe were assembled per the kit instructions, but I used the roof from an Intermountain 1937 ARA box car instead because I had an Intermountain roof on hand with a Kadee Apex running board installed. I further modified the car by using a Kadee Apex brake wheel and a brake step cut from Plano #202 brass Apex running board material, plus I added brake gear components from the Cal Scale #283 brake gear set. I painted the car with Scalecoat Box Car Red, then masked the sides and painted the rest of the car with Testors Gloss Black. I used the new Speedwitch D113 (“Atlanta & West Point and Western Railway of Alabama 1937 AAR Box Car and A&WP, W of A, and Georgia Railroad War Emergency Box Car Decals”) to letter the car. This is an excellent decal set—I highly recommend it.



To weather the car, I applied a light wash of thinner and artist's oil flat black to the sides and ends of the car to weather the area between the wood planks and other details. I used Bragdon's powders to weather the roof

The completed model prior to painting.

(brown and black), and then highlighted the car with various shades of tan and light brown. If I applied too much weathering I would gently rub the area with steel wool. For certain applications, like weathering the roof, I mixed Bragdon's Powders with paint thinner to apply the powders evenly and thoroughly. Before sealing the model with Testors Dullcote, I painted some of the sheathing randomly with different shades of brown I had available on my paint desk, including Scalecoat PRR Freight Car Color, Testors/Floquil Freight Car Red and Light Freight Car Red. This technique provides a prototypical contrast between the sheathing boards on the car, and also differentiates the model from steel-sided cars.



The trucks are Tahoe Model Works Double Truss AAR 50-ton type with semi-scale wheelsets, sandblasted to improve paint adhesion, then painted Testors flat black. I used Kadee #78 couplers to complete the model.

Photo 2. Georgia Railroad 19899. Pullman-Standard photo, Smithsonian Institution collection.



Incidentally, Intermountain is releasing an HO scale injection-molded War Emergency box car shortly. If you're having difficulty obtaining the Sunshine kit, use Intermountain #41070, which can be found on the Intermountain website

Photo 3. Georgia Railroad war emergency single-sheathed box car 19870 on the ACL in Fayetteville, North Carolina, February 22, 1959. Photo by Chet McCoid. Bob's Photo.

at <http://www.imrcmodels.com/newshocomingssoon.html>.

Atlanta and West Point 37508



Photo 4. A&WP 37508, as finished by the author, began as an undecorated Intermountain 1937 AAR box car kit.

Atlanta and West Point Railroad took delivery of two series of 1937 ARA box cars beginning in 1941. The first series was delivered by Pullman-Standard's Bessemer, Alabama plant in December, 1941. The cars, constructed under P-S Lot 5685, included only 40 cars. The cars were numbered 37300 – 37339. They were equipped with Miner brake wheels, Apex Tri-Lok running boards, and ARA trucks, and were constructed with the W-corner post arrangement. The cars were painted an attractive aluminum and black paint scheme.

The second series of cars—as modeled here—were constructed Pullman-Standard's Bessemer, Alabama plant in March, 1945 under P-S Lot 5783A. Like the previous series, these cars featured W-corner post construction, Miner brake wheels, Apex Tri-Lok running boards, and ARA trucks. Unlike the previous series, these cars were painted freight car brown with black roofs, ends, underframes and trucks. This series was also smaller than the previous series, with only 25 cars numbered 37500 – 37524.

I built my HO scale model of A&WP 37508 based on a photo obtained from Bob Liljestrand of Bob's Photos at Cocoa Beach 2009 RPM meet. I started with an Intermountain #40799 Undecorated 1937 ARA box car. I constructed the car and added several additional detail parts, including A-line steps and grab irons from the Red Caboose PRR X29 kit. On the B end of the car, I installed a Kadee Apex brake wheel, wire grab irons, a handmade uncoupling device, and Kadee #58 couplers. I mounted a



The completed car before painting.

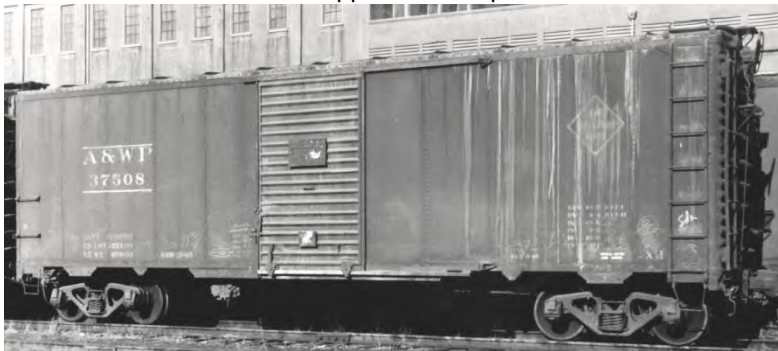
Kadee Apex running board on the roof. I had a spare set of Proto 2000 Spring Plankless trucks with Reboxx #1-1-1.015 semi-scale wheelsets on hand so I installed them, although the prototype car used ARA trucks. I wanted to use

Intermountain ARA trucks because I think they best represent the prototype, but I did

not have the correct semi-scale wheel sets on hand for them. I did not upgrade the brake gear, but plan to do so at a later date using the Cal Scale #293 set.

I painted the sides of the car with Scalecoat Box Car Red and painted the roof, ends, underframe and trucks Testors Gloss Black. When the paint was dry, I decaled the car using a variety of decals from a number of different manufacturers. The reporting marks are hand-laid using the Microscale Railroad Roman white lettering set. The weight and dimensional data are from the Speedwitch D-100 Southern Railway AAR Box Car set, and the West Point Route monogram is from Kurt Fortenberry's SE-4 Western Railway of Alabama PS-1 box car set.

I weathered the car by streaking the rivet lines and top and bottom sills of the car with fat black and Burnt Sienna paint, then going over it with the original box car red. I did this numerous times over a few weeks to get the desired result. Occasionally during the process I would use fine steel wool to streak the weathering. I finished the weathering by applying a light coat of Testors Russian Earth Brown on the underside of the car, then highlighting the entire car with Testors Dark Tan. I then applied white route cards from Microscale and chalk marks using a white artist's pencil per the prototype photo. I did not weather the car as it appears in the photo



*Photo 5.
Atlanta and
West Point
Railroad 37508
at Roseville,
California,
October 24,
1954. Bob's
Photo.*

Western Railway of Alabama 18209

The third model is the Western Railway of Alabama 40-foot PS-1 box car. Western Railway of Alabama acquired two series of 40-foot PS-1s beginning in 1952. The first series of 110 cars, constructed by Pullman-Standard's Bessemer, Alabama plant, were delivered in 1952 as part of P-S Lot 8021 (this lot was for a total of 160 total cars, and included 50 cars for the Georgia Railroad, series 39501-39550). They featured a six-foot Improved Youngstown door with high-mounted placard, Miner handbrake, Apex Tri-Lok running boards, and A3 trucks. The cars were numbered 18100-18209 and were painted freight car red. A second series of only 17 40-foot cars was delivered in 1956 with eight foot doors in a silver and black livery.

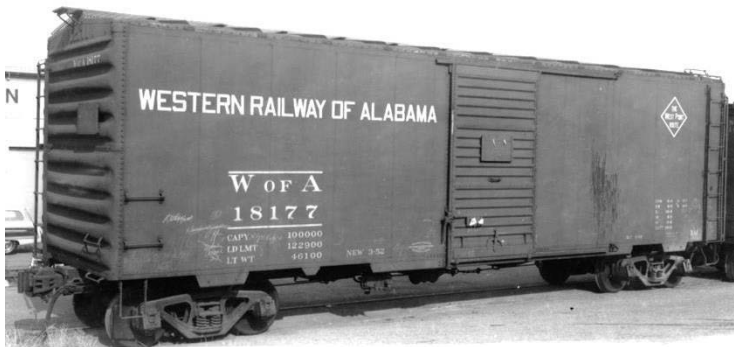
The model (photo 6) is the factory-finished Kadee HO scale box car, item #4304 with Kadee #5 couplers. The car was factory-painted red oxide with road number 18209. The only modifications I made to the car were the addition of Kadee ASF Ride-Control 50-ton trucks with Reboxx #33-2-1.015 semi-scale wheelsets (the "2" in the Reboxx item description stands for "double-insulated", which are required for Kadee's all-metal trucks).



Photo 6. The Kadee factory-painted model, weathered but prior to application of HO scale car cement to the roof.

Photo 7. Western Railway of Alabama 18177 at San Francisco, December 1953. It didn't take long for black car cement to begin peeling from the roof sheets. Note that the roof cement coating is already deteriorating off this car's roof after just 21 months.

Many cars lost virtually all of the roof cement coating after three or four years, leaving the black coating over the seam caps, which tended to adhere much better than to the galvanized steel roof panels. Photo by W.C. Whittaker, Ed Hawkins collection.



Study of the photo of WofA 18177 (see photo 7) raised some questions about the color of the roof. The car appears to have peeling paint, indicating the roof was finished with black car cement and not freight car red. I contacted freight car expert Ed Hawkins and asked him about the colors of the cars. Ed said "You're on your own for the paint specs as I have not been able to locate them. According to P-S correspondence files at the Illinois Railway Museum, Lot 8039 for GA 39551-39660, A&WP 37900-37989, and L&N 5000-7199 had freight car red sides, ends, and underframes, black (car cement) roofs and trucks and white stencils. All of these cars had 8'-wide door openings. The 200 cars for A&WP and GA were built 11-52."

Ed also commented, "During the early 1950s (say 1951 to about 1954), the standard PS-1 paint specification was for a *black car with freight car red sides*. Everything but the sides was coated with black car cement and the truck side frames received a "light-bodied" coat of black paint by the manufacturer. If a customer wanted ends that matched the sides, it was a deviation from the PS-1 specification and the customer normally had to pay extra for deviating. This is why so many PS-1s built in the early 1950s had black ends and roofs. Included was a small order of 40' PS-1s for the Pennsylvania Railroad in early 1954 with cushion underframes. These were the only PRR box cars that ever received black ends as far as I can tell."

Since I wanted to accurately model the prototype car as delivered, I made an educated decision based on photo evidence and Ed's research and painted the roof of the model black. While the Kadee PS-1 box car remains a state-of-the-art model, the factory-painted versions are occasionally found to be in error. Kadee released PS-1 models of the other cars from Lot 8039 mentioned earlier (item #5106, A&WP RR 37989 and item #5107, Georgia RR 39639) and painted the entire models red oxide, without the car cement roofs per the prototype. Kadee also produced several series of early SAL PS-1s entirely painted box car red, but the prototypes were delivered with car cement (black) roofs. After masking and painting the roof with a mixture of Testors gloss and flat black paint, I weathered the car lightly with Testors Russian Earth Brown sprayed with an airbrush, and also brush-painted to highlight the car's detail.



Photo 8. After upgrading the paint, the model matches the family appearance of the rest of its Georgia, A&WP and WofA brethren, with black roof and black (weathered) trucks.



Well-worn WofA 18120 was photographed in El Centro, California by Chet McCoid on New Year's Day, 1955. Bob's Photo, courtesy Ed Hawkins.

Many thanks to Ed Hawkins, who generously provided information and comments for this article, Bob Liljestrand for allowing the use of photos from his collection, Larry Goolsby, Pat Wider, and Justin

Building Award Winning Engines Part 2

*by Phil Bonzon, MMR
photos by the author*



Description:

The B&O's Class V-2 Hudson #2, "Lord Baltimore" was an experimental engine with a water tube firebox built at the B&O's Mt. Claire shops in 1935 while



Col. George H. Emerson was General Superintendent of Motive Power and Equipment. The engine worked the "Royal Blue" lightweight train between Washington and New York, later it served the "Ann Rutledge" on the subsidiary Alton RR, then B&O secondary routes and



finally was scrapped in 1949. The "Lord Baltimore" has been imported as a brass model, but is rarely seen on the market and at prices beyond my engine budget. The "Lord Baltimore" is a handsome steam engine with its



unique clean British styling and I "needed" a model of it, so I scratch built one. Prototype photos #1 & 2 came from the Internet, while Bill Barringer of the B&O Historical Society and who worked at B&O's Mt Claire Shops provided other photos (#3, 4, 5, 6, & 7) and drawings (see

page25), also see construction sketches page 25.



Photo #3 shows the Lord Baltimore's back head.
 Photo #5 shows the Lord Baltimore under construction at the B&O Mt Claire shops in 1935.
 Photo #4 shows the air pumps on the tender deck.
 Photo #6 shows the tender's vestibule and full width diaphragm. You can also just make out some of the equipment on the tender deck.
 Photo #7 shows the pilot's hidden coupler, during construction.

Construction: (40 points Max. 37 Actual Points)
Construction Planning Sketches on page 25.



Engine: Using the 1941 Locomotive Cyclopedia as guide, I made sketches for the frame and scratch built it from .062" x .500" brass bar. The bar was cut using a band saw; the openings in the frame were drilled and filed to shape and final size of the opening for the bearings was filed to size.



Oilite bearings, drivers and coil springs were purchased from Greenway Products, *so the drivers would be sprung.*

Holes were drilled into the edge of the frame rails to accept brass rods, which were solder to the frame and locate the driver coil springs.



Holes were drilled and tapped for 0-90 brass FHMS to retain Precision Scales plastic brake hangers & shoes #31643.



A .062" x .437" brass bar was fabricated and retains the drivers in place with (2) #2-56 brass MS.

A non-working suspension system with leaf springs and equalizing bars was scratch built from styrene strips. The leaf springs were made from multiple layers of styrene

strips and bonded together with plastic solvent adhesive and CA adhesive for styrene to brass.



Cab end of Frame: Members were scratch built from brass bars and soldered to frame. A washer was soldered to the underside and a hole drilled and tapped for the drawbar. Details are styrene bonded with CA adhesive.



Cylinders: The cylinders were scratch built from styrene sheet and rod, cut and filed to match the prototype's shape and bonded together with plastic solvent adhesive. The basic cylinder structure was made from .062" styrene and wrapped with .010" styrene sheet.



Holes were drilled, using a drill press, thru the structure for the styrene cylinder rods.



Using a drill press, holes were drilled into the cylinders to accept the crosshead guides, valve gear and cylinder rods.

The **crosshead guides** were scratch built from .093" square brass



tubes that were slit with a razor saw to accept the crossheads. The slits were opened up with a jeweler's file. The crossheads were made before the guides were bonded to the cylinders with CA adhesive to make sure they moved freely.



Cylinder Crossheads: The crossheads were cut from .062" x .500" brass bar, filed to shape, drilled, tapped for MS, and 3/64" cylinder rod soldered to the crosshead. The crossheads were filed to shape to fit inside the crosshead guides.

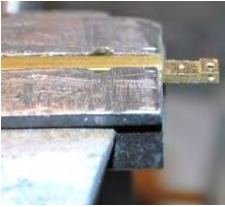


The **crosshead guide supports** were cut from brass bar

and sheet and then soldered together and to the crosshead guides. Holes were drilled and tapped to accept the valve gear-reversing link.



The **eccentric cranks** were scratch built from .125" square brass bar, holes drilled, tapped, filed to shape and cut to



length.

The **main and side rods** were scratch built from nickel silver code 100 HO-scale track, by filing the track into a H shape with equal flanges, where connections are to be made the flanges are filed down the web, so that brass washers can be solder to these locations, finally after careful measurement, using a drill press, holes are drilled thru the webs for connecting the rods with the drivers with Hex head MS, brass tube spacers and washers.



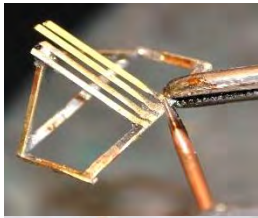
The **valve gear** was scratch built from .020" brass bar & sheet that was cut and filed to shape, formed, drilled, tapped and assembled with Hex head MS. The reversing



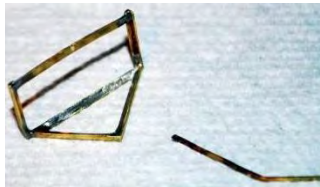
links were made from styrene sheet and brass rod.



soldered together and the slats are .015" x .032" brass strips cut, bent and resistance soldered to the pilot frame.



The **pilot platform** was scratch built from .010 brass sheet, cut, formed, filed to shape and soldered to frame. The pilot steps were



made from brass angles, cut, filed to shape and solder to pilot platform. The pilot was

installed with RHMS tapped into the pilot platform face. The **hidden coupler** was added to the pilot by reinforcing the slats with a brass backup that was solder to the slats,

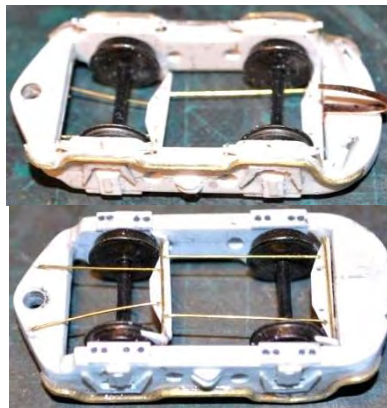


then the slats were cut with a Dremel cut-off disc. A plastic dummy coupler was installed on a styrene shelf and reinforced with a scrap piece of styrene. **Pilot braces** were made from brass bars and soldered to pilot and platform. Cut lever was made from brass rod and added to pilot platform with stanchions. Tichy Trains' .030" plastic rivets were applied to each pilot slat with CA adhesive.

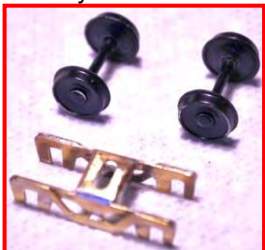


The **Trailing Truck**

was scratch built to match the prototype drawing on page 18; from (3) layers of .040" styrene sheet bonded together with plastic solvent adhesive, cut, filed to shape, holes drilled, .020" brass rod annealed, bent to shape and bonded to styrene with CA adhesive to form the lip and the top of the truck. Journal boxes, journal retainer plates, leaf springs, brake levers / shoes and miscellaneous details were made from scrap styrene. Grandt line NBWs were applied to the journal retainer plates with plastic solvent adhesive. The brake rods were made from brass rods. The semi-elliptical spring was made from .008" phosphors bronze sheet, bonded to the styrene with CA adhesive, and used to support the rear of the engine. See Construction Sketch Page 25.



The **pilot truck** was scratch built to match the prototype drawing on page 13; using .020" brass sheet, cut, filed to shape and solder together. The wheels are Kadee 36" with the pointed axle ends removed. The brakes were made from brass rod, tubing and scrap styrene for the shoes.



The journal retainers were made from styrene strips with Grandt Line NBWs applied with plastic solvent adhesive. The axles are sprung by a leaf spring made from .008" phosphors bronze sheet. A shouldered RHMS and coil spring retain the pilot

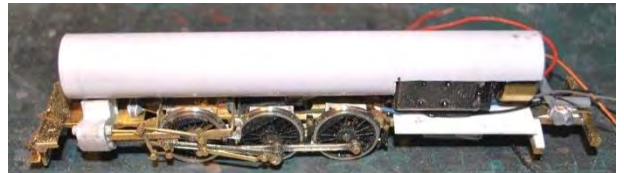


truck to the engine.

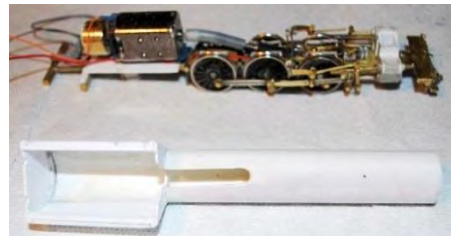
Motor and Gearbox: A NWSL 28-1 gearbox, #140-6, #167-4 can motor and 3405-6 flywheel were ordered and installed. The motor was bonded to the top of the ash pan with CA adhesive and wired with the proper color-coded wiring. The motor was connected to the gearbox by flexible plastic fuel line tubing. The frame is shown on wood blocking so that it could be test run and broken in.



Engine Boiler: Styrene is my favorite building material; therefore, I decided to use it for scratch building the engine's boiler. The Lord Baltimore has a straight boiler, which simplified construction, and I found that 1" schedule 20



PVC plumbing pipe had the right outside diameter for the boiler. The pipe was cut to the proper length and notched to clear the motor.



The **water tube firebox** was scratch built from .040" styrene sheet and the sides reinforced on the bottom edge with a 1/8" square styrene strip all bonded together CA adhesive. A



Dremel tool and cutter were used to cut a slot in the bottom of the boiler to clear the motor's



shaft.

The **smoke box front** was scratch built from multiple layer of varying thickness of styrene discs, bonded together with plastic solvent adhesive, and bonded to the boiler with CA adhesive. The edges were shaped with files and sandpaper. The concave surface was made with plastic putty. After drilling holes in the smoke box, Tichy Train's .030" plastic rivets were installed by inserting the rivets with plastic solvent adhesive. The handrails were made from .020"

brass rod with Precision Scales' cast brass posts installed into holes with CA adhesive. The hinges were made from scrap styrene. The Headlight and bracket came from my scrap box. The front of the bracket was reshaped with a file to match prototype.



The boiler walkways were scratch built from .040" styrene and after bonding to boiler with CA adhesive; angled filler strips of .020" styrene strips were installed.

The **arches in the walkways** for the drivers were scratch built from styrene.



The vertical surfaces from .040" and the curved horizontal

surfaces from .010" styrene bonded together with plastic solvent adhesive. Minor



imperfections were corrected with plastic putty and then sanded smooth.



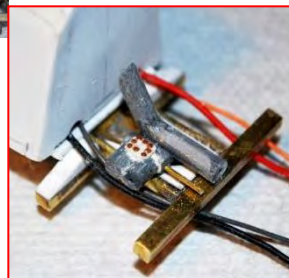
The **smokestack** was scratch built from a styrene tube and styrene quarter round strip to form the lip, bonded together with plastic solvent adhesive. The bottom of the smokestack was sanded to match the round profile of the boiler.



The **walkway sides** were scratch built from .020" styrene strips, cut to size, profiled and bonded to walkways

with plastic solvent adhesive. The **pilot-walkway steps** are Greenway Brass castings, shortened and soldered to pilot platform. The boiler braces are brass rods.

The **stoker / motor** were scratch built from scrap styrene. The drive shaft is made from brass rod.





Cab and back head were scratch built from .030" styrene sheet. Tichy Train's .030" plastic rivets were applied to the back head with plastic solvent adhesive to simulate firebox fasteners. Brass washers were used for gauges and brass rod for throttle, brake control and firebox door handle. Awnings, windows, doors, steps, gutters, hatches and diaphragm were made from various thickness of styrene. The center section of roof was left off until the interior could be painted. The windows were glazed with Testors' "Window Maker" after painting.



The **domes** were scratch built from multiple layers of .040" styrene, bonded together with plastic solvent adhesive and then shaped with a file and sandpaper. The sand dome lids are brass washers with the holes filled with plastic putty. The **steam turret box** and the **boiler steps** were scratch built from styrene sheet. All **handrails** were made from .020" brass rod and installed with Precision Scale cast brass posts into holes drilled into the boiler. **Cylinder valves** were made from brass rod and the elbows from

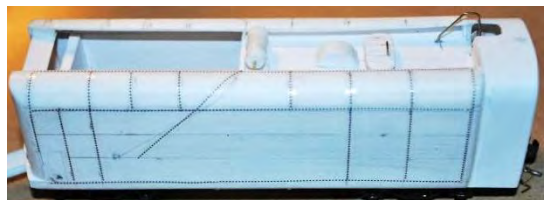
heat-shrink tubing. The **bottom of the firebox** was shaped to match the prototype with a file and sandpaper and has Tichy Train's .030" plastic rivets and Grandt Line's plastic NBW inserted into drilled holes with plastic solvent adhesive. Cal-Scale brass castings for marker lights, pop valves, injectors, power reverse and feedwater check valves were



installed with the appropriate **pipng** made from brass rods, as was the power reverse

lever. The **bell** was turned from a brass rod using a Dremel tool and file. The bell hanger was made from brass strip, cut, formed and soldered. **Grab irons** and **door handles** were made from .016" brass rods. The boiler was filled with lead shot and white glue to increase its weight. The boiler assembly is fastened to the frame using the pilot truck MS and (2) MS thru the back of the cab into the frame.

Construction of Tender: Working from prototype drawings and photos, I scratch built the tender body, frame, vestibule and diaphragm from styrene sheet and shapes that were bonded together with plastic solvent adhesive.



See Construction Sketch page 25.



The sides were made from .100" styrene sheet with the bottom edge rounded with sandpaper to match the rolled edge of the prototype. The curved surface at the top and

front were made by slitting a 1/2" diameter styrene tube lengthwise and mitering the ends where the two join together. The balance is of .030" styrene sheet, except the working full-width diaphragm, which is .010" styrene sheet. Various sizes of styrene rod and strip were used to make the air tanks, piping, water scoop, scoop air cylinder, water hatch, vestibule braces and tender door hinges. Handrails, cut-levers and grab irons were made from .020" brass rod. The back-up light was made from an aluminum tube and has a LED wired to the DCC decoder. Trucks, ladders and brake assembly came from my scrap box. The compound air pump is a Cal-Scale part, located on the tender deck as per the prototype. Archer Transfer rivets were applied to create the rivet pattern. Grandt Line plastic NBWs were applied to the sides of the water scoop. Lead weights were added to tender interior.



Electronics: Working headlight and back up lights were installed using LEDs, with resistors that are wired to the DCC decoder. A Tsunami DCC/Sound decoder, with the correct B&O three chime whistle, was installed in the tender and hard-wired, using the correct color code wire, to the engine. Power pickup is provided by the tender wheels and the engine's drivers thru phosphors bronze wipers.

Detail: (20 Points Max. 20 Actual Points) The following is a list of **engine details**: A full brake system, including, air cylinders, levers, rods, hangers, shoes and piping; sprung drivers and a non-working suspension system of leaf springs and equalization levers; dummy brakes and springs on pilot and trailing trucks; slatted pilot with flat bars riveted and hidden coupler: pilot cut levers, steps, braces; smoke box front with rivets, handrail, locking levers for door; correct working headlight and bracket with numbers; classification lights with fairings; smokestack with correct lip; smoke box hatch; correct shaped sand domes with filler caps and grab irons; correct bell; correct shaped steam dome with B&O whistle; pop valves with shield; steam turret cover with hatch; Handrails with posts; boiler lagging straps; boiler steps; water tube firebox lagging hinges; rivets and NBW at bottom of fire box; driver arches; power reverse with reversing bar to cab; Feedwater piping, check valves and injectors; walkway shirting; Walschaert valve gear with reversing linkage; cylinder valves with connecting elbows; detailed back head with rivets, firebox door with handle, throttle, gauges, water level, valves, stoker tube and brake control; cab roof hatches and air deflector; cab roof gutters; cab awnings; cab handrails; cab walkway ledge; cab doors with handles; cab armrests; cab steps; back of cab vestibule with side braces; stoker tube, motor and drive shaft under cab; engineer and fireman in the cab. The following is a list of **tender details**: full brake details including cylinder, air tanks, piping, levers, rods; water scoop, levers with NBWs and air cylinder; air, signal and steam piping and hoses: dual compound air pump on tender

deck with piping and air tank; water scoop deflector and water filler hatch with hinges and handle on tender deck; Coal door with hinges and latches at front of tender; tender vestibule with interior braces and offset from tender sides, working full-width diaphragm; step, ladder with handrails; handrails; cut-levers; working backup light; water and coal capacity shown on back of tender and a coal load.

Conformity: (25 points Max. 20 Actual Points) Comparing my model to the prototype,



you can see that the engine and tender conforms to size and appearance of the prototype. Its driver / wheel type, sizes and spacing are almost identical to the prototype. It has the same clean British appearance; pilot; smoke box and levers; boiler; walkways;

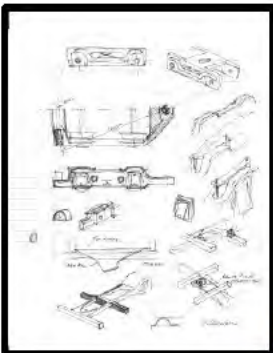
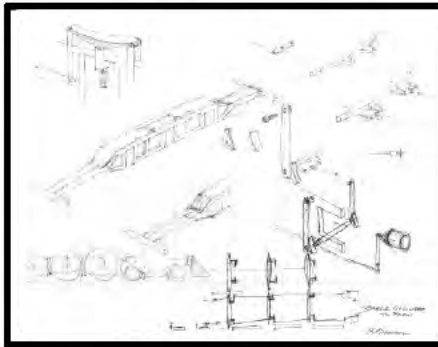
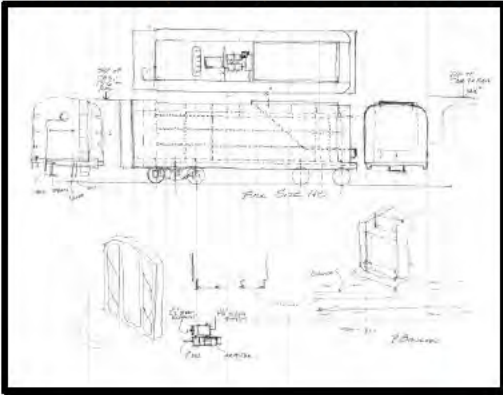
firebox; back head; cab; cab vestibule; domes; bell; whistle; brake system; suspension system; pilot and trailing trucks; air tanks an air pump located on the tender deck; tender vestibule and full width diaphragm (see page 1). The Floquil Dark Blue paint matches the B&O Blue according to the B&O Historical Society and the Lord Baltimore was Blue, when built, since it pulled the Royal Blue.

Finish and lettering: (25 Points Max. 16 Actual Points) The engine and tender were primed; using an airbrush with Floquil enamel Primer; then Floquil Dark Blue was airbrushed and when dry; the entire engine and tender were airbrushed with Floquil Clear gloss enamel in preparation for decals. I custom made decals on my computer for the engine name "Lord Baltimore" and for its class "V-2" and used MicroScale decals for the Baltimore and Ohio, for the stripes and tender capacities. After the decals were dry, Floquil Clear gloss enamel was again airbrushed over the entire model. The model was lightly weathered (using an airbrush, with thinned Floquil Grimy Black and Grime) since the Royal Blue, which the Lord Baltimore pulled, was a crack B&O passenger train and was kept clean with only the grime and soot accumulated from its daily run.

Scratchbuilt: (15 Points Max. 15 Actual Points) The following **431 engine parts were scratchbuilt**: The brass frame (18 pieces); pilot, pilot steps and pilot platform (25 pieces); pilot shield (3 pieces); cylinders, cylinder valves and crosshead guides (20 pieces); full brake system (16 pieces); driver suspension system including leaf springs and equalizing levers (40 pieces); main and side rods (14 pieces); Crossheads, crosshead guide supports, eccentric cranks, valve gear and reversing linkage (31 pieces), pilot truck (16 pieces); trailing truck (61 pieces); ash pan (7 pieces); stoker (6 pieces); smokebox front and door, hinges and locking levers (8 pieces); boiler, firebox, smoke stack, lagging straps, lagging hinges and boiler steps (30 pieces); Walkways with arches and skirting (26 pieces); sand domes, steam dome smokebox hatch, steam turret enclosure (20 pieces); classification light's fairing (2 pieces); bell and pop valve shield (3 pieces); backhead including gauges, water level, firebox door and handle, throttle, valves and brake control (16 pieces); cab including basic structure, windows, doors, awnings, arm rests, gutters, hatches, steps, vestibule, walkway ledges and handrails (68 pieces); drawbar (1 piece). The following **116 tender parts were scratchbuilt**: The tender frame (2 pieces); tender body and coal bunker (20 pieces); vestibule and braces (9 pieces); full width diaphragm (11 pieces); air tank, piping, water scoop deflector, water hatch with handle and hinges (19 pieces); cut-lever, grab irons, handrails and backup light (6 pieces); coal bunker door with hinges and latches (21

pieces); water scoop and power cylinder (7 pieces); air, signal and steam lines (3 pieces); air tanks, brackets and piping (18 pieces); brake rods (2 pieces). **A total of 547 pieces were scratchbuilt and the following commercial parts were used:** NWSL can motor with flywheel; NWSL gearbox; Greenway Brass drivers, axle and bearings; Kadee wheels; miscellaneous screws and nuts; Tichy Train's plastic rivets; Grandt Line plastic NBWs; Cal Scale brass castings for headlight and bracket, classification lights, whistle, compound air pump, power reverse, check valves, injectors, steam hose; Precision Scale's brass handrail posts and plastic brake hangers; Bachmann tender trucks; Greenway Brass's pilot to walkway brass steps; LEDs: Tsunami DCC/Sound decoder; a MRC speaker, a Kadee coupler; plastic tender ladders and brake assembly from scrap box.

Construction planning sketches used for the construction of the model



2012 NMRA National at Grand Rapids
2nd Place with 108 Points
2011 MCoR Regional – 1st Place with 104 points



Gateway Division Annual Contest Results

Photos by Richard Schumacher



Steam Locomotives (popular vote) 1st Place CB&Q #5601 (above) and 2nd Place WG&F #23 (right) both by Dave Roeder



Diesel Locomotives
1st Place
Judged &
Popular vote
Cargill #315 by
Dave Roeder



2nd Place Judged WG&F #9705 by Dave Roeder



2nd Place Popular Vote (tie) BN #2552 & BN #1437 both by Dave Roeder





3rd Place Popular Vote #7 (left) by Dave Roeder

3rd Place Judged BN #1632 (not pictured) by Dave Roeder

Traction

1st Place (Popular Vote & Judged) EST&S #7 by John Carty



Passenger Car

1st Place (popular vote) WVM #2 by Phil Bonzon





3rd Place Popular Vote (tie)
SG&N #15 (left) and narrow
gauge UTLX #11057 (below)
both by Dave Roeder



Caboose

1st Place Popular Vote
B&O #C2075 (left)
2nd Place Popular Vote
B&O #C2910 (below)
both by Phil Bonzon



1st Place Judged BN
#10928 by Dave Roeder
(left)

2nd Place Judged (not
pictured) Wabash #2154
by John Carty

3rd Place Popular Vote
Wabash #2230 by
Dave Roeder



On-Line Structures



1st Place Popular Vote (above) Stone
Station by Randy Meyer

2nd Place Judged & 3rd Place Popular
Vote (right) Water Tank & Tool House
by Jon Marx



2nd Place Popular Vote (below) St. Clair
Ice by John Carty



3rd Place Popular Vote Freight Station by Gregor Moe



Off-Line Structures



1st Place Popular Vote & Judged Rock Road Fire Department (above) 2nd Place Popular Vote Haus Hardware (right) both by John Carty





3rd Place popular Vote & 2nd Place
Judged 1601 W. Main St. by John Carty

Dioramas

1st Place Power House (below) by Tom Trotter

2nd Place Backwoods Engine House
(bottom) by Tom Trotter





3rd Place 2600 Block of Ridge Ave by John Carty

Whole Train



1st Place Red Ball Freight by John Carty

All Winning Photo entries may be viewed at <http://www.gatewaynmra.org>.

Model Photo

1st Place Dave Anderson

2nd Place Dave Anderson & Jeff Meyer

3rd Place Dave Anderson

Prototype Photo

1st Place Tim Stout

2nd Place Tim Stout

3rd Place Tim Stout

Division Minutes

by Jimmy Ables,

Gateway Division Clerk

Meeting Minutes for September 16, 2013

Timothy Stout, Superintendent

Phil Bonzon, MMR, Assistant Superintendent

Hank Kraichely, MCoR Director

Jimmy Ables, Clerk

Richard Velten, Paymaster

Ron Gawedzinski, Activity Coordinator

Clinic: The structure building contest was held. Members who received structure kits at the May meeting labored hard and applied

some considerable creativity to complete their kits. Judging was tough.

Winners in the Master category were:

1st Ray Jones

2nd John Carty.

Winners in the Novice category were:

1st Tom Conboy

2nd Bonnie Moe.

Thanks to all who participated

Business Meeting:

Superintendent Tim Stout called the meeting to order. There were 28 members present.

Minutes of Previous Month's Meeting

Minutes from the August 2013 meeting were available for review prior to the meeting start. The minutes were approved as written.

Treasurers Report

Jim Ables presented the paymasters report as Richard was on vacation.

Merchandise Report

Jim Ables reported we are out of wheel sets. An order for more wheel sets has been placed. On hand we have 11 NMRA N-gauge standards, 3 NMRA HO gauge standards, and 2 NMRA OO-On3 gauge standards.

RPO Report

John Carty is nearing completion of the fall RPO. Deadline for submissions is 1 October.

Directors Report

John Carty has an article in the current edition of the Caboose Kibitzer. You can obtain a copy at <http://www.mcor-nmra.org/>. Look under publications.

Achievement Program (AP) Report

Phil Bonzon reported John Carty has met the criteria for Author and his application is pending at national.

Publicity Chair Report

Don reported we had a good showing at the Boeing show. He has contacted the Mississippi Valley N Scalers about their annual train show. At present Don is unsure if we'll have a table as he hasn't received a response. Don solicited for people to work the show in case we do get a table.

Outside Activities Report

Ron Gawedzinski is on vacation however; Tim noted the 5 October, NRHS/Gateway Division picnic at the WF&P in Glencoe MO is drawing near. He requested anyone wanting to attend signup.

Old Business

- Website: The officers met with Richard on the 14th of September to preview the new website. We are hoping to go live before the end of the month.
 - o Richard Schumacher demonstrated the new website and provided comments on things still to be done. The website is looking good.
 - o Brian Post is working to gather/update info on layouts posted on the website.
 - o Richard discussed techniques for taking photos to be posted for the website. Richard also asked folks who have articles on the website to please provide a bio and picture.
- Working on getting people to opt into the

membership directory.

New Business

- Fall meet discussion. Tim discussed planning activities for the Fall Meet. Phil is organizing clinicians. Dave Roeder has lined up three layout tours. We are looking for door prize donations and we need volunteers to help with setup and all the associated activities.
- Still looking for someone to bring refreshments to the St Louis meetings.
- Thanks to Mark Twain Hobbies for donating 24 \$10 gift cards.

Announcements

- Brian Post is now a distributor for Micro Engineering products.

Drawings

- 50/50 winner: Vinita Lake
- Gift Card: Jim Anderson

The meeting was adjourned.

Meeting Minutes for October 13, 2013

Timothy Stout, Superintendent

Phil Bonzon, MMR, Assistant Superintendent

Hank Kraichely, MCoR Director

Jimmy Ables, Clerk

Richard Velten, Paymaster

Ron Gawedzinski, Activity Coordinator

Clinic: John Carty gave a presentation on "Kitbashing for Dummies." The clinic outlined the basics to kit-bashing common items into pieces that stand out.

Business Meeting:

Superintendent Tim Stout called the meeting to order. There were 20 members and 1 guest (Brenda Stout) present.

Minutes of Previous Month's Meeting

Minutes from the September 2013 meeting were available for review prior to the meeting start. The minutes were approved as amended.

Treasurers Report

Rich Velten presented the paymasters report.

Merchandise Report

Rich Velten reported wheel sets were ordered from Inter-Mountain. The fine scale wheel sets were shipped (awaiting receipt), standard gauge wheel sets are backordered. Anticipate several months for delivery. On hand we have

11 NMRA N-gauge standards, 3 NMRA HO gauge standards, and 2 NMRA OO-On3 gauge standards.

RPO Report

John Carty reported the fall 2013 RPO was published and sent to the members. He requested members send articles for the winter 2014 edition. Deadline for submissions is 1 Jan.

Directors Report

Hank discussed the Joint Regional Convention next June in Memphis. He had registration forms for those wanting to attend.

Achievement Program (AP) Report

Tim reported we are still awaiting John Carty's Authors certificate. Phil is lining up clinics for the fall meet. Currently he has 3 clinics lined up. Looking for a forth clinic.

Publicity Chair Report

Don solicited for volunteers to work the Great Train expo, although it is unclear if we have a space as of this time.

Outside Activities Report

Tim reported the joint picnic was a success despite inclement weather. About 90 Gateway Division and National Railroad Historical Society members attended.

Old Business

- Website: The new website is on-line and we have received several good comments from non-members.
- Brian Post continues to collect and update information for layout descriptions for the website.
- Fall meet discussion. Tim went over the list of things to be done and requested volunteers to help with various activates. Discussed AV equipment requirements for clinics. Brenda Stout asked if there was any interest in having an organization (i.e. the church) provide food for sale. This was tabled for this year as there isn't time to work the logistics.
- Discussed the member directory and what we need to do to move forward. Things that need to be accomplished are obtaining member permission to include their data in the directory and update info from the 2010 directory. Will require letters to the membership, the clerk will work on the letter.

New Business

- No new business

Announcements

- New Switzerland layout display in Highland
- S Gauge layout at Museum of Transportation

Drawings

- 50/50 winner: Jim Anderson
- Gift Card winner: Kathy Brawley

The meeting was adjourned.

Timetable of Events

Mon., February 17, 2014

Gateway meeting at O'Fallon, IL.

Sat., February 15, 2014

Afternoon of Model Railroading,

noon – 4 p.m., Admission: free, Kirkwood Railroad Assoc., Hough School Bldg., SE corner of Lockwood & Sappington Rds., Oakland, MO.

Atlon Train Show, 10 a.m. – 3 p.m., Admission: \$3 (children under 12 free), Franklin Masonic Lodge, 1413 Washington Ave., Alton, IL.

Sat., March 8, 2014

Boeing Model Railroad Club Swap Meet, 10 a.m. – 3 p.m., Admission: \$3 (children under 12 free), Queeny Park, 550 Wiedman Rd., Ballwin, MO.

Mon., March 17, 2014

Gateway meeting at Trinity Church.

Mon., April 21, 2014

Gateway meeting at O'Fallon, IL.

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 \$66 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 \$5, running from July 1 through June 30. Members who subscribe mid-year are given extended memberships. In addition to the quarterly newsletter, a member directory is published listing names, addresses, and information about individual modeling interests. New members also receive a Division membership pin.

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

To join, visit our website and complete the form at <http://gatewaynmra.org/membership.htm>

Division Officers

Superintendent

Timothy (Tim) A. Stout

Assistant Superintendent

Philip (Phil) G. Bonzon MMR #427

Clerk (Secretary)

Jimmy D. Ables

Paymaster (Treasurer)

Richard (Rich) M. Velten (Marilyn)

Division Director

Henry (Hank) W. Kraichely

