



*OFFICIAL PUBLICATION OF THE SUNSHINE REGION, NATIONAL MODEL RAILROAD ASSOCIATION
"THE BEST REGION UNDER THE SUN"*



The Journal Box

Volume 83

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Sunshine Region Members 456

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From the President's Corner

President's Update: Reflecting on the Last Quarter

Dear Members of the Sunshine Region,

As we bring another quarter to a close, I want to reflect on the journey our region has taken over the last three months. Together, we've faced challenges, demonstrated resilience, and celebrated the strength of our model railroading community.

September: Fostering Community and Engagement

We began this quarter emphasizing mentorship, fellowship, and inclusivity within our membership. Our collective efforts are not just about model railroading but about creating a supportive and welcoming environment where everyone's skills and contributions shine. Despite setbacks, our love for the hobby and commitment to one another remain steadfast.

October: Weathering the Storm

Hurricane Milton required us to make the difficult decision to cancel the 2024 Iron Horse Regional Convention. This event was highly anticipated, but the safety and well-being of our members had to take precedence. Following the storm, we refocused our energy on supporting each other through recovery while planning for future opportunities to gather in 2025.

November: Looking Forward

With the challenges of the hurricane behind us, we've pivoted toward rebuilding momentum through division meets, virtual events, and future planning. These opportunities allow us to connect, share our expertise, and reignite enthusiasm for upcoming regional and national gatherings, such as Chattanooga 2026, where we aim to set a new T-TRAK record!

December: All Hands On Deck

All hands were invited to an open membership meeting with the Board to discuss the Past, Present and future state of the Sunshine region. Treasurer Glenn Kopriva demonstrated how the current Budget planning is earning money for the Sunshine region. What actual Regional convention costs were and how we offset costs for our members. We discussed how Grouper can assist and if qualified will pay YOU up to \$130 dollars per year to participate in your favorite hobby. Look at our Website for more information, <https://www.nmrasunshineregion.org> Look for more open meetings in the future.

Making Florida Whole Again

Looking to the future, we are excited to announce a campaign to unite the Sunshine Region. Our goal is to bring Florida members of the Southeastern Region (SER) back into the Sunshine Region (SSR) to make our region whole again—from Pensacola to Jacksonville to the Keys.

This mission is about one region, one team, one mission, and one goal for the shared vision of an inclusive and vibrant model railroading community. We are currently in discussions with the SER and these members. Please encourage your Florida friends in the SER to vote in favor of joining the SSR. Let's build a stronger, united Sunshine Region.

Keep an eye on the **Telegraph Key** for updates, news on divisional events, all-hands membership meetings, and upcoming clinics—whether in person, virtual, or hybrid! As always, our dedication to mentorship and growth continues to guide our steps. Together, we'll make the NMRA Sunshine Region stronger than ever.

Thank you all for your unwavering commitment and passion for this incredible hobby. As always, my door is open to any member any time. Feel free to contact me.

Andy J. Zimmerman
ATCS AW USN Ret
President, NMRA Sunshine Region

From the Editor's Desk

Well, we weren't so lucky with the weather a couple of months ago, many within the state suffered damage, I'm not sure of the number of our members who were affected. Hopefully, if there were damages, they are minor ones, and everyone is on the positive side of the storms and recovering. Unfortunately, no one got to experience the products of the negotiations among Jeff Guzowski, Glenn Kopriva, Marion County, and the Hilton. The convention focus of operations, modules, education and the merging of the three. From the numbers posted, there were quite a few who would have been in the hotel as well as the clinic rooms, there might have also been a record set for the banquet, at least a record for the past decade.

There is a plus side to this, all the effort put forth for the cancelled convention will be in place for the 2025 convention, so the region has something positive to look forward to. For all of you who registered for the convention, the clinics, and the banquet, I thank you for your participation and your trust in the organization. Nothing will change for the next go around, the convention remains at the Hilton in Ocala, which was chosen for the convenience of having everything under one roof. We just need weather that will not come thorough at 100 miles per hour.

Last quarter I brought up the topic of voting and said that I hoped you would take the time to vote for those individuals who you believe have your best interests in the forefront. The overall percentage of those who vote has not changed over the years, so that tells me the majority of you are satisfied with your leadership. That's a good thing.

I think we have a lot to look forward to with the coming of the New Year.

To expand upon my perceived success of the Journal Box, I have been fortunate to have many contributors providing articles, pictures and thoughts. I appreciate their participation and enthusiasm, Mike Collins MMR, David Leider MMR, Bob Poole, Robert Raymond, Frank "Chip" Pecere, Glenn Kopriva, Gene Jameson, Ed Harris, Bill Cialini, Mark Ellis, Andy Zimmerman, and (posthumously) Mike Brock in providing contents for all of the SSR.

So, what do we have to look forward to? Well for starters, I have intentions of putting in a little color to the Journal Box, spruce it up a bit. Hopefully I can get some long-term articles from individuals that we can carry through the entire year on a specific subject, maybe focusing on a prototype, a railroad, or layout construction. We have the convention to look forward to, albeit dependent upon the weather forecasters and the conditions. Again, what was slated for this year will be offered for next year and as with anything the more you look at it the more you believe you can make improvements.

So, I believe this coming year will be an adventurous one for the region, there are new ideas to be broached, and the convention will be one for the photo album. With that said, I would like to reiterate, all individuals attending pay close attention to the camera and your phone so as to document the convention. Whether it be a clinic, an individual, a model found in the contest / celebration room, because as one person put it years ago, "We all love pictures!". But don't wait for the convention, take pictures of your division meets also, isn't it nice to put a face to a name? I believe we have a lot to look forward to, I think the region as a whole is doing well. I believe the enthusiasm of the membership is up from what it used to be, and I believe the divisions are continuing to improve with both activities and membership participation.

Robert Leonard

This Quarter's Contributors

Mike Brock - Mike's outlook of PMing is back for another installment. Part 3 covers his concepts of what is familiar, what is important, and answers the question, how do you mix the two? As I said last quarter, his writing is unique!

Mike Collins MMR - Mike is back again with pre-published articles that date way back. Some of you may not have been born yet!! Mike talks about lineside industries that can be modeled for your layout with "**Culm Coal**" an industry that can be added to your coal operations plans. He has another article about High & Wide loads that deals with "**Heat Exchangers**". He also brings acknowledgement to the SSR participants who entered the photographic contest to the annual NMRA calendar, a trifecta for Mike.

Mark Ellis - Mark has taken the Showcase section this quarter with his modeling of a FEC Gevo prototype.

Ed Harris - Ed provides his outlook and the possibilities of animation for advancing the story he is creating for the modules. The next installment of the "**Model Railroading is Fun**" story gives his ideas for drawing a viewer's attention to something other than trains.

Gene Jameson - Another Step by Step from Gene this quarter from a previously published article. Written in the same format as last quarter's offering with "**Steel Loads Part 2**". This time he describes how to build a "High & Wide" steel beam load from styrene and details it. Construct it, color it, weather it, and mount it. As in previous articles, Gene modifies the rolling stock to better represent the prototype.

David Leider MMR - Has written two articles based upon "Big Sugar". David wrote of his "**U.S. Sugar Steam Excursion**", he describes the route and system parameters of USSC and the equipment used for the excursion. He also wrote "**U.S. Sugars' Sugarcane Operations**" where he describes with text and pictures the processes to harvest and deliver the vast sugarcane fields of south Florida.

Chip Pecere - Chip explains in "**Discovering Op Sessions**", his introduction to operations on the Western Bay layout and what may become an obsession and I am sure a focus for his home layout. The operations "bug" has really hit home and he has become a devout advocate of the movement.

E C H O E S

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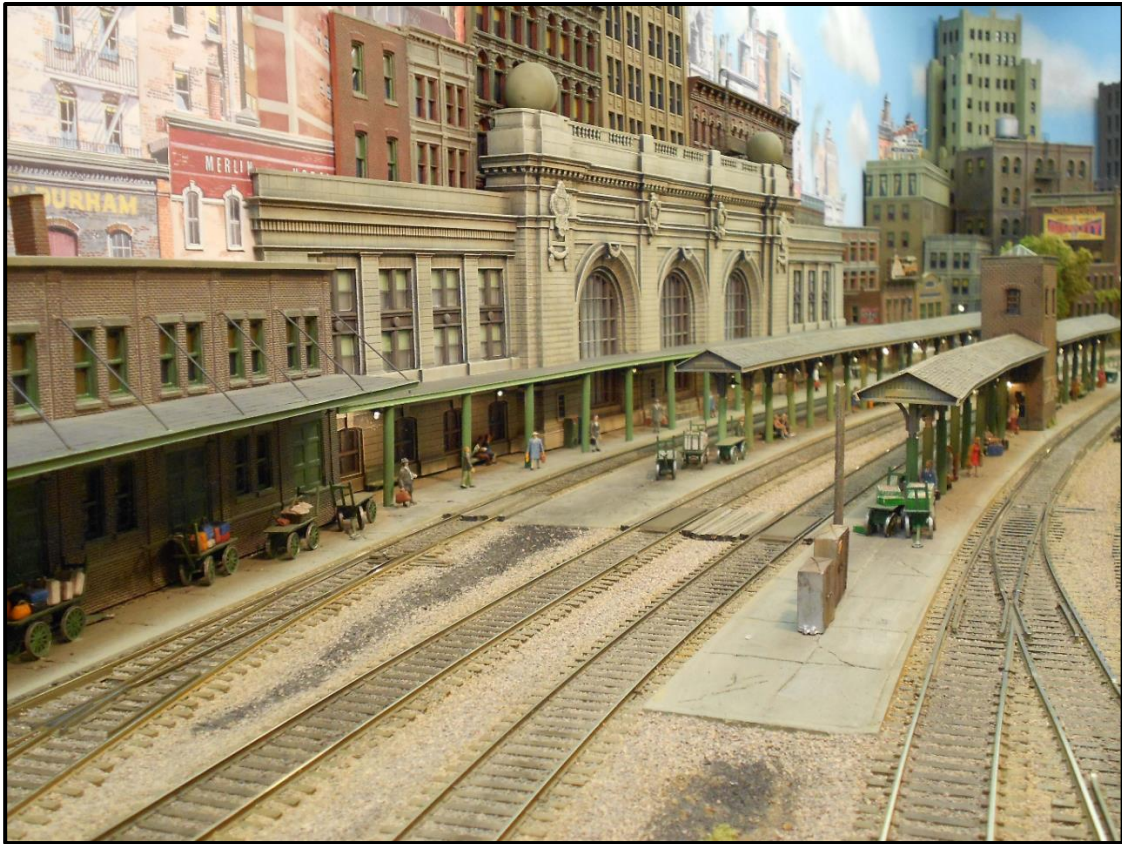


E.C.H.O.E.S is a modular model railroad club located in Miami-Dade, Florida, dedicated to building and displaying our HO scale model railroad layout. Our purpose is to enjoy and promote the hobby of model railroading and preserve the history of railroading in South Florida. The club was started in the summer of 1985, with the goal of presenting a HO scale modular model railroad layout for display at "The Harvest Festival". Throughout the years, the layout has been displayed at regional conventions, four NMRA National Train Shows (Atlanta twice, Ft. Lauderdale, FL and Orlando), and other events in Miami Dade and Broward counties. We do running/operating sessions several times a year and welcome guests to join us. Membership is open and we welcome anyone who shares an interest and passion for Model railroading.

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Albany Union Station looking north on Vic Roman's New York Central layout



The Real Thing

{courtesy of Mary Jean Frank}

Discovering OP Sessions

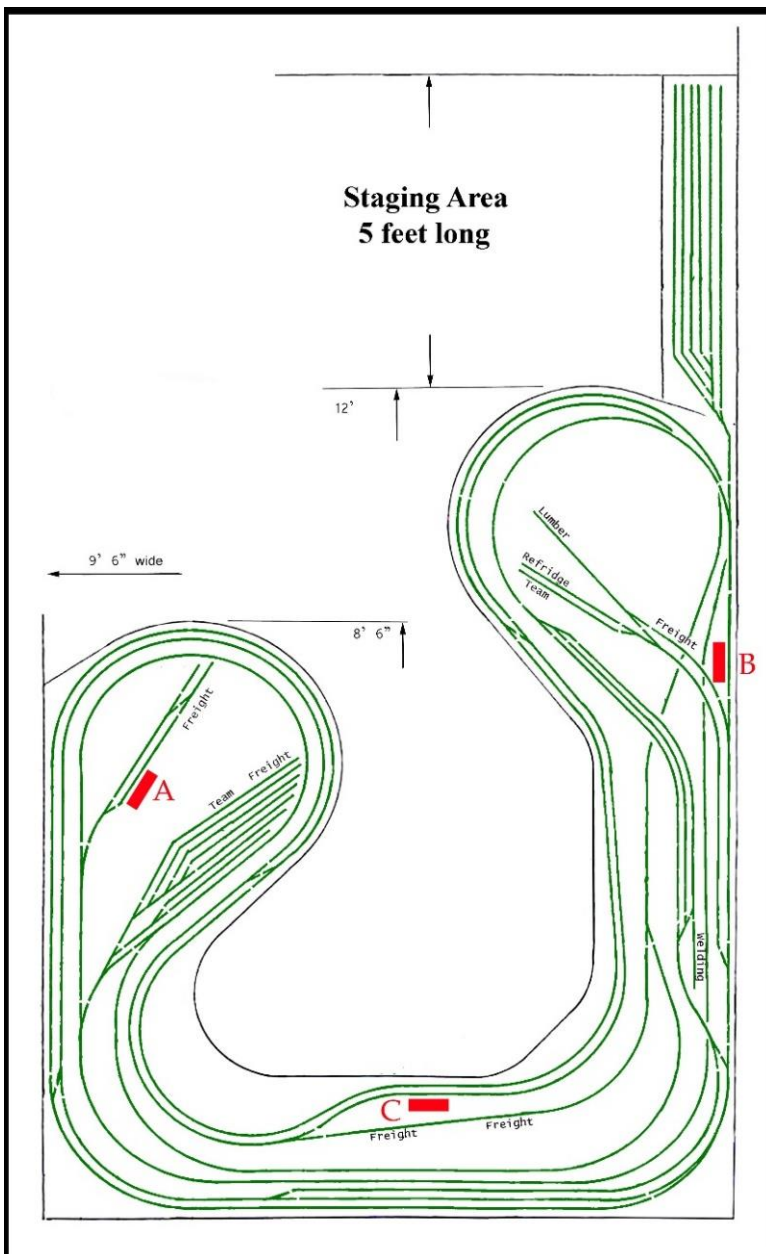


I've been a NMRA member on and off for over 40 years. When I was younger, I was in work mode and just happy to have my railroad. Now that I'm retired, I have more time to be involved with other modelers. About two years ago a friend of mine, Eric Menger (our treasurer) introduced me to Al Sohl. Al has the Western Bay Railroad in Port Saint Lucie. It's a beautiful On30 Railroad and is set-up for OP (operating) sessions. Something I had heard of but never knew what's involved. An Op session is when you operate (Op) your layout as if it is a real working railroad. I started attending Al's weekly meetings. I studied his RR and got familiar with it. After operating trains on Al's railroad week after week I knew all the towns, sidings, and industries, then I finally attended an Op session. Al hosted about 15 of us. There are analog fast clocks around the room running at one hour for every 15 minutes in real time. We had a dispatcher in another room and every engineer had a scheduled switch list for his or her train. We all have headsets to be in contact with the dispatcher, who is

almost always Robert Raymond, letting him know where you are and if you're ready for clearance to continue to the next town.

MAN did I mess up... but it was so much fun! I was so busy worrying about the time that I had left cars behind and even dropped off the wrong cars to wrong locations. The following Tuesday the group went over all the switch lists. We now had to correct all the mistakes so that the railroad matched the list. All of a sudden I realized that you can model for a purpose. We have a reason to move cars across the rails. We have to deliver goods, pick-up empties or waste, even move passengers from one city to another—all this and stay on schedule. I now expanded my passion for model railroading. I started doing more Op sessions in my area. Ken and Bev Farnham have a few a year as does Don Irace. Well, I am improving, unless you ask Robert Raymond (LOL), and now I want to modify my railroad for Op sessions.

The great thing about this hobby is that there is no right or wrong answer. You can experience what others are doing and then decide what will work best for you. I've been going over my track plan and asking the opinion of my fellow modelers. Now I think I know what I want... we



all know how this could change halfway through construction, but here we go. I'm pretty happy with the track plan that I designed. Wherever I inserted the word "Freight" there will be an industry to be serviced. The yard in the city of Elizabeth will be for staging emptied and loads to return to Chester and loads that will need to be swapped on the team track. This should allow three engineers at the railroad and a dispatcher in another room. I'll go into the details of construction and wiring at another time.

This is about Op sessions and a whole new way of looking at what we're building and giving our railroads a purpose. If you have never been to a session, it's time. Give it a few tries. If you mess up like I did...so what? It's all OK and part of the learning curve. It's very easy to get hooked. I guarantee you'll improve your modeling skills and make friends along the way. We have about 500 Sunshine Region members in this state. There's always someone in your neighborhood to share ideas with. You can reach out to our SSR board, your division super, or start searching on Facebook. I'll always try to help chippecere@gmail.com

Chip Pwccere



The Western Bay Railroad is a 950 square ft On30 layout in Port St Lucie. We meet almost every Tuesday evening. We are looking for new members to join our group. There are OP sessions & scenery that we are still working on. If you're a modeler and serious about learning, give us a try! Go to our website or contact Al Sohl MMR als0622@yahoo.com

'No dues, just a great experience'
westernbayrailroad.org





Eastend Meet, Dante, Virginia June 2010

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MODEL RAILROADING IS FUN

a Continuation

View Top Mesa Animation

by Ed Harris

For View Top Mesa, my dream was to add seven different animated features on this 2' x 4' module. I am not sure if seven is too many or not. I believe, with my skill level, getting an Eagle to flap its wings would be the most difficult. Making him fly should be easier to accomplish. So, I decided to leave the Eagle alone. For now!

I want a rabbit to hop and move a distance. I can get him to hop. I can get him to move across the module. The question is, can I get the rabbit to hop and move across for a distance? So, I have decided to wait on this animation idea also.



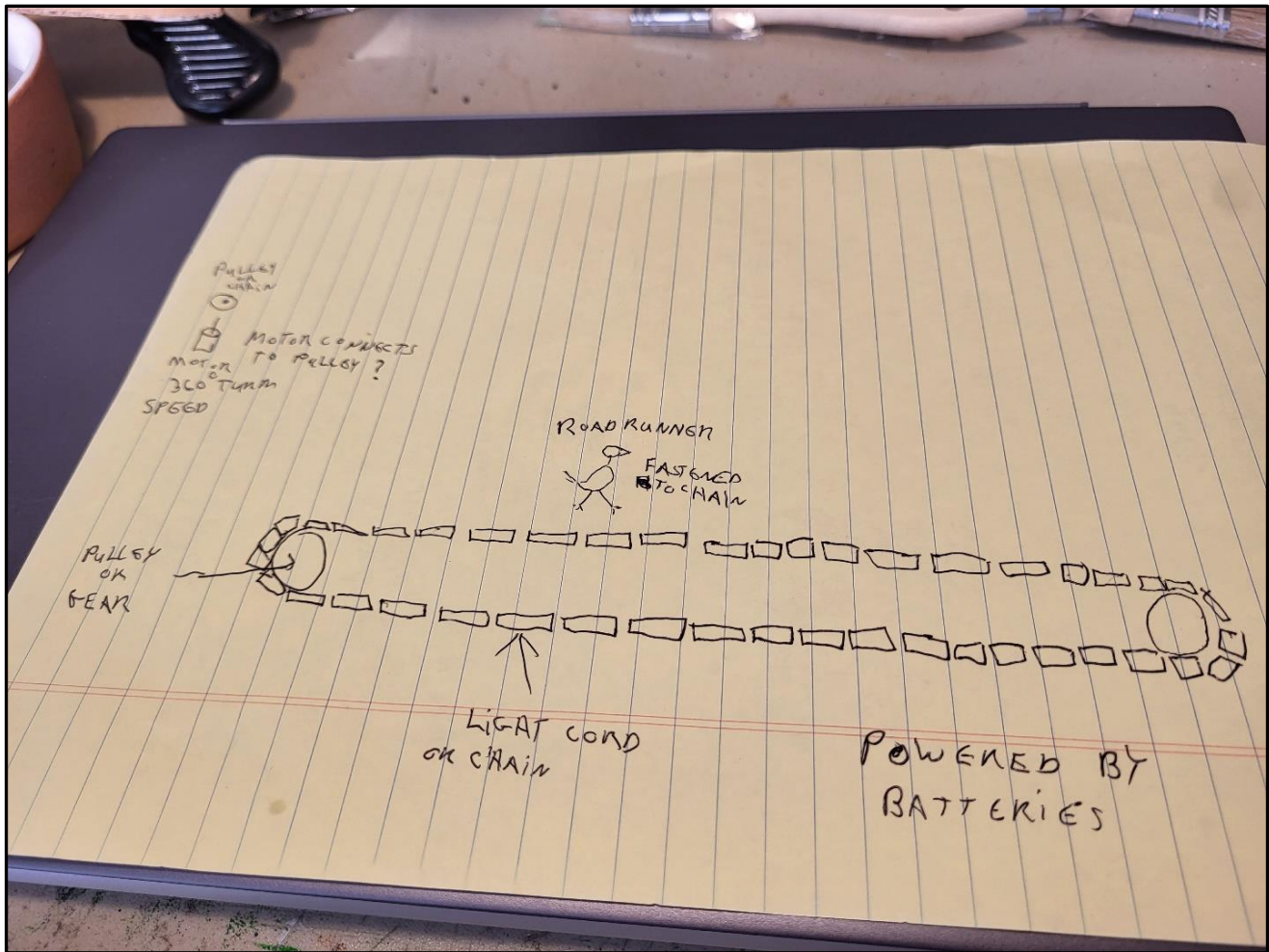
That leaves me with five animation ideas. I have a SEUTHE chimney that smokes. I had installed it into a cabin that I had put together. It looked good, smoke coming out the chimney and filtering through tree branches.

For the caboose challenge a couple years ago, I built a smaller View Top Mesa. I added the chimney to the caboose and powered it with two, 9-volt batteries. It did not work, too much juice in the chimney? 18 volts should have been plenty. Connections good? If need be, I will purchase another one.



That leaves four animation ideas that I will talk about in this column. The first one will be a roadrunner that circles two rocks. My wish is to have the roadrunner start from one side of a rock, dash to the other rock, circle the rock to the other side and stop. Then start from new rock, dash to 1st rock, circle it to the other side and stop. At each start, it would be nice to hear “BEEP – BEEP.”

While staring at the drawing of the mechanism that I think would work, I realized that when I cut a slot for the wire that holds the roadrunner that I just made an island. I will need to build a support for Rock Island. My module has a 1 x 4 base, 16” centers. Should be plenty of room for five animation ideas. I reckon Rock Island to be Step 1.



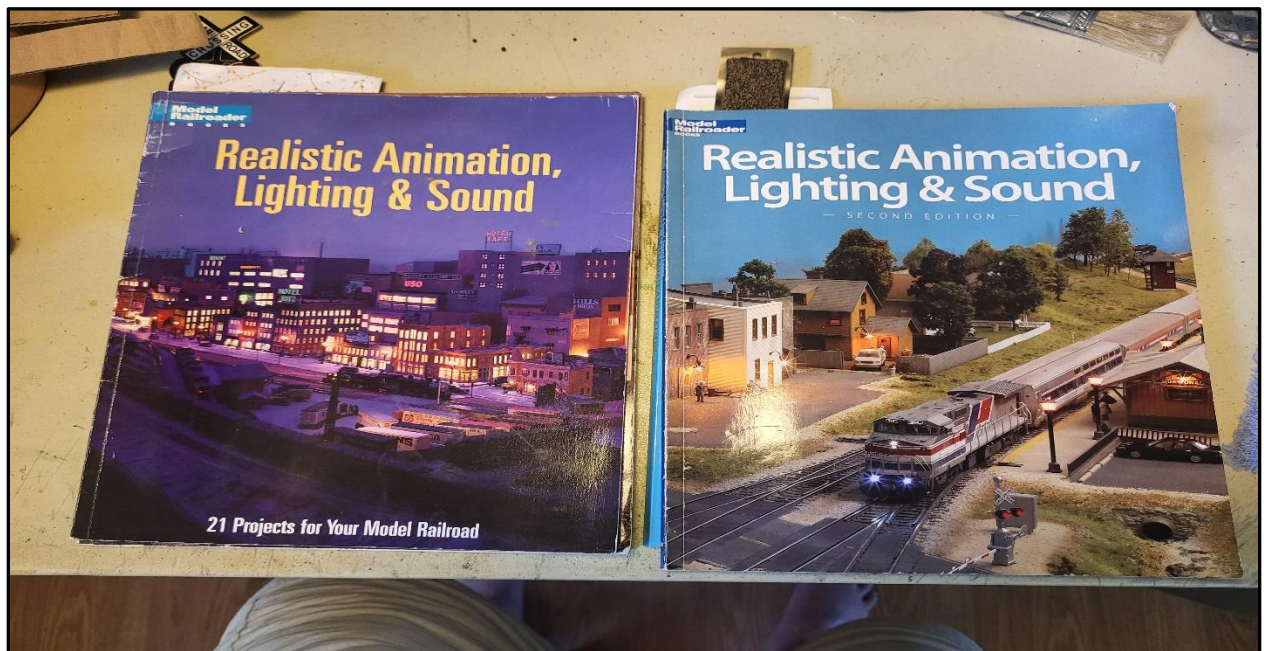
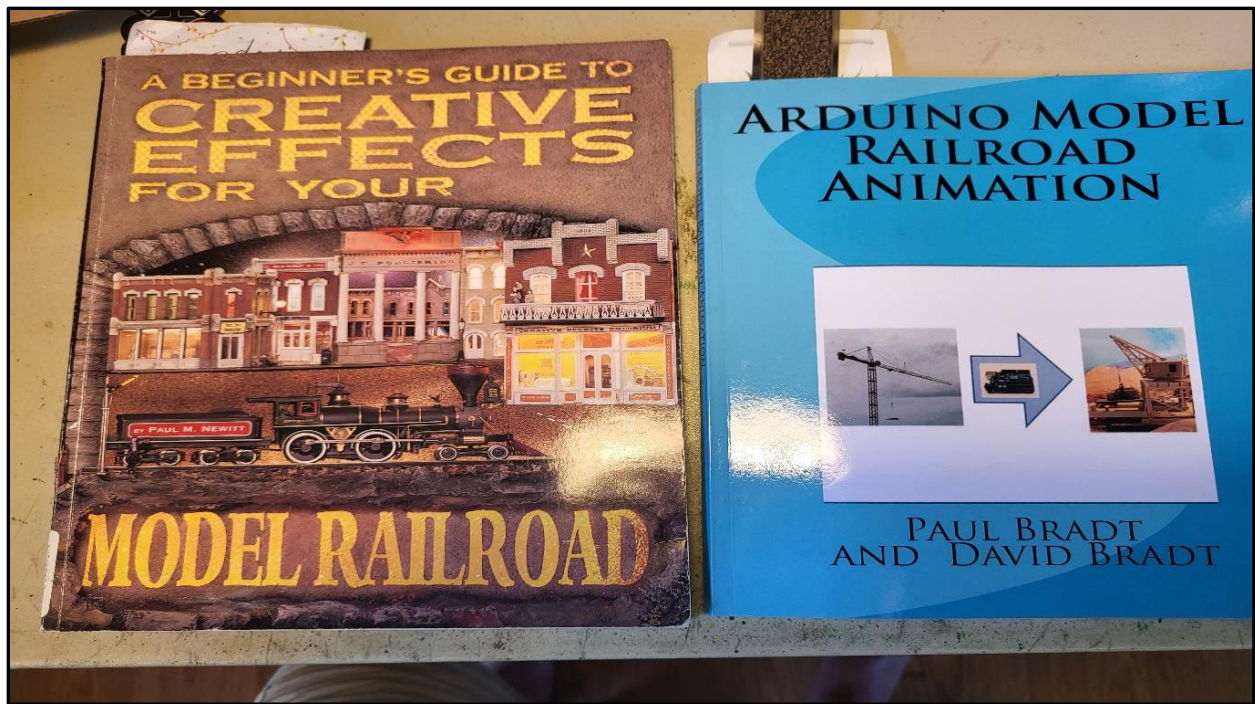
Size of circle? I have 12" from back of rock to back of rock. My rocks are $\frac{3}{4}$ " across. 1" pulley or gear? Maybe $1\frac{1}{4}$ ". Bicycle chain, I think is too big. If I used a pulley, getting the light cord or whatever, it would have to be tight enough to make the light cord turn. I reckon this to be Step 2. Figuring out what to use for gear and chain.

Step 3 should be to power it. My thoughts are metal gears hooked to a motor. I understand there are different sizes and speeds of motors. Not too slow that it looks like the roadrunner is taking a stroll, and not full-blown roadrunner speed. Maybe a brisk walk. I have yet figured out how to stop my roadrunner. This is going to take some thought.

Me, being old school, I want to do this erector set style. Without any computer. I am not a fan. A computer does make my handwriting look good. There are a lot of people saying ARDUINO. I just get used to doing something with the computer and then it upgrades and I must figure out things again. After this last upgrade, I could not figure out how to turn the computer off. My daughter figured it out.

Now that I have relearned turning on and off my laptop, I am trying to get photos from my phone to the computer. Before it was easy. Hook the phone to the computer and the computer started asking questions until the task was done. Simple. The kind of stuff my brain likes.

In order to do the stop and go of the roadrunner, I just may need an Arduino. I am definitely not into learning to program. If that is what it takes, so be it. These are the books that I have to help guide me.



I can use advice from any who wish to share ideas and thoughts.

My email address is edharris34470@gmail.com

My first step is to get gears and motors. Hopefully, next time I write, I will have made progress.

Ed Harris

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South Florida Railway Museum

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Open Dates for 2025

11:00 AM to 4:00 PM

The Museum is Open on the 2nd Saturday of the month

01 - 11, 02 - 08, 03 - 08, 04 - 12,
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09 - 13, 10-11, 11-08, 12-13

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Juniata Shops, Altoona, PA September 2017

U.S. Sugar Steam Excursion

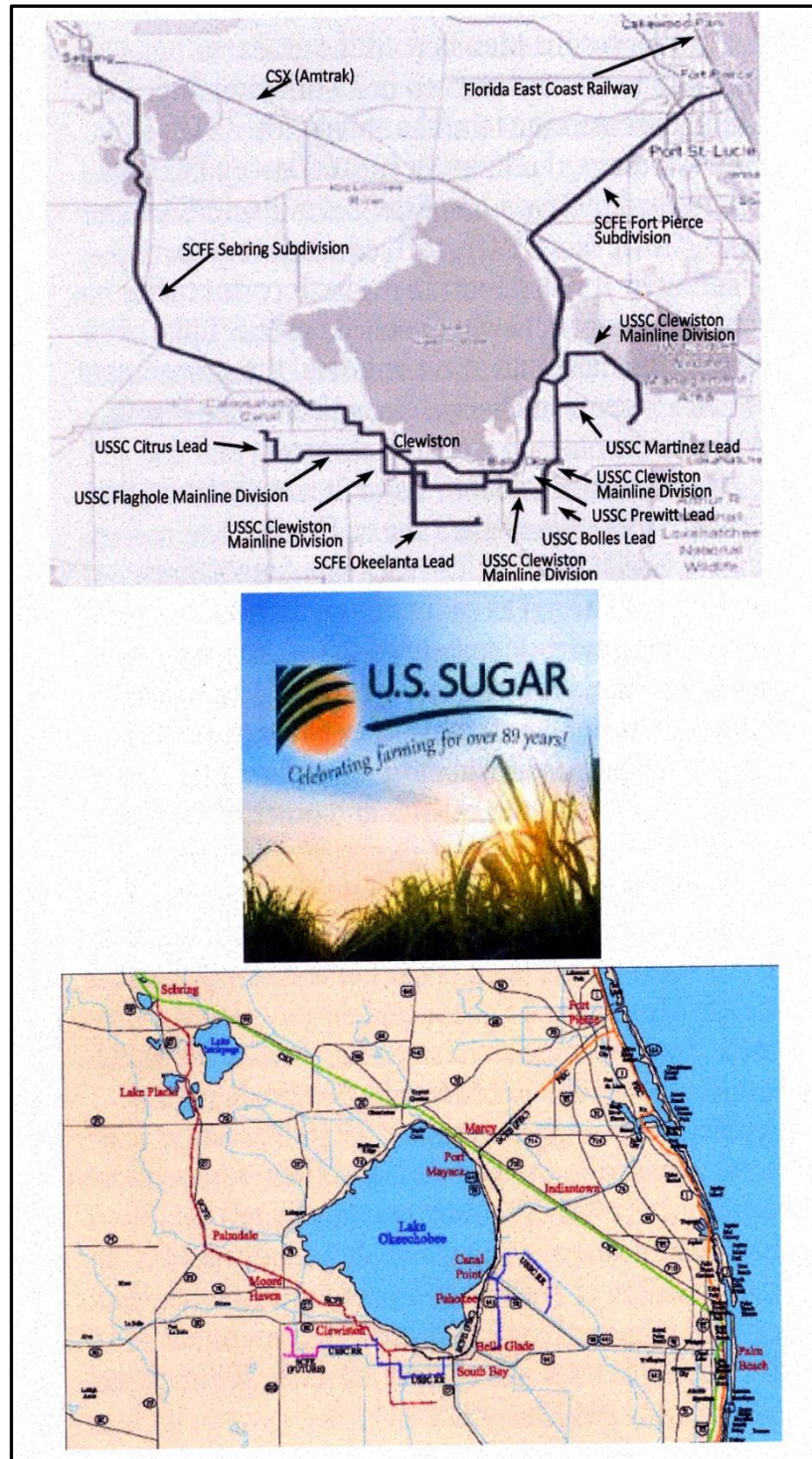
by David J. Leider MMR

As part of the recent Lexington Group for Transportation History convention in West Palm Beach, I got a chance to ride the U.S. Sugar's, Sugar Express and Brightline from WPB to Orlando. This is my report of the U.S. Sugar steam excursion.



Former Florida East Coast #148 stopped at a grade crossing for photos prior to backing up for a photo runby.

U.S. Sugar owns 475,000 acres in central Florida. Sugar is grown on 230,000 acres. A network of tracks transports the cut sugarcane from the fields to the processing plant in Clewiston. The cane is made into refined sugar and molasses. The company also farms a large part of its acreage with citrus, vegetables and other crops.



The history of the line is complicated, with ACL (Atlantic Coast Line, now CSX) on the west end and FEC (Florida East Coast) on the east. There is a 168-mile railway that was built by Southern Sugar and later U.S. Sugar to haul sugarcane. Some of the trackage only opened a few years ago. A page from the 36 page brochure prepared for the excursion. Lake Okeechobee is in the south central part of Florida. The railroad circles it on several sides. It is all a prime sugarcane growing area.

The company operates the South Central Florida Express (reporting mark SCXF) originally known as the South Central Florida Railroad (SCFE). The trains operate from Sebring to Fort Pierce via Clewiston around the southern perimeter of Lake Okeechobee and serve customers at 26 locations. With 168 miles of track, it is the largest private agricultural railroad in the US.



Our train backing up for a runby, sugarcane field in foreground

The main line is divided into east and west and the Miami Canal on the south side of Lake Okeechobee is where the two sides, former ACL and former FEC officially connect. The milepost numbers on each side are independent from one another and remain as they did under the predecessor companies.



One of the runbys in a remote area.
The line not only goes through the cane fields, but also Palmetto scrub.



Number 148 charging toward us during a runby

The railroad began operations in 1994 on tracks previously owned by ACL. In 1998 operations expanded on tracks leased, then purchased from FEC. In addition to SCXF, U.S. Sugar has its own private tracks known as the U.S. Sugar Railroad (USSC) which consists of multiple branch lines connecting to SCXF tracks.

In late 2016, U.S. Sugar re-acquired USSC #148, a 4-6-2 Alco Pacific they owned from 1952 to 1970. It was originally purchased from the FEC. #148 was restored by FMW Solutions to run on recycled vegetable oil. It began its first revenue service on May 28, 2020, pulling the last cane train of the 2019-2020-harvest season. In 2021 the SCFX began operating the Sugar Express (CHOX) using a steam locomotive and some refurbished passenger equipment.

Our trip took us from Bryant, its connection with the FEC, to Lake Placid where it connects with CSX. The plush Florida East Coast observation car Bay Biscayne leased from the East Tennessee Railroad Museum brought up the rear. It was preceded by ex-Pennsy 1952 Lounge Car Palmdale.



The Palmdale and Bay Biscayne brought up the rear
Coaches were comfortable and well maintained.



Interior of one of the coaches



A group of Lexingtonians settled inside the former Florida East Coast observation car Bay Biscayne to enjoy the ride.



There were a number of restored antique tractors on display. Miami Locks is a restored baggage car that contains a gift shop and concessions. A good place to stand in the doorways to take photos.



Heavyweight car Clewiston in the yard. Everything on the excursion train was impeccably maintained. The color scheme is a variation of the IC's City of Miami, but with more vibrant colors.



Sou #843 is a former Southern Railway Pullman. It was built in 1958 and also served on NS before being retired and sold in the 1990s. It was restored by East Tennessee Rail services in Oak Ridge, Tennessee and shipped to Clewiston in April 2023.



USSC's modern locomotive shop. Notice the brightly painted sanding tower. Everything on the railroad is well maintained.

The South Central Florida Express operates;
eight GP11 locomotives (road numbers 302-305, 308, 310, 312)
six GP38 locomotives (404-405, 407-410)
six GP40 locomotives (501-506)
two SD40 locomotives 6323 and 6324.

U.S. Sugar also operates one SW1500 and one MP15AC switcher. Nearly all the locomotives on SCXF and USSC carry USSC reporting marks. SCXF and USSC also operate about 800 modified cars to haul cane.





At Lake Placid, USSC's #312 is coupling on to our train to return it to the shops.

The railroad does not have turning facilities. Usually, a diesel is attached to the rear of the consist to return most excursions. Since we had a tour of the entire railroad, there was not enough time to return by rail.

The company did acquire a former Wabash 90-foot turntable from St. Louis in 2021 that will be refurbished and installed in Clewiston.

It is well worth your while to check it out. There are few places in the U.S. that you can ride a steam engine running at 40 mph.

Showcase

This quarter's showcase displays the efforts of a new modeler, I mean a new modeler! Also, a new member of the South Florida Railway Museum and the Southern Div., Mark Ellis. Mark is responsible for changing the appearance, this is his first attempt with painting and detailing of an existing GEVO Demonstrator and applying the new paint scheme for the FEC's parent company, Grupo Mexico.



From this



To this

Mark took a Broadway Limited GEVO, stripped the original paint and with decals from Circus City 160-08 transformed the model to its new look. Although, there were adjustments to be made.



From this



To this

As you can see by the size of Mark's hand and the grid pattern of the work surface this is "N" scale. The adjustments necessary, it was determined the shade of green on the decal sheet did not match the color of the prototype. To make the adjustment, paint the decal with NYC Jade Green, and so it was. With railings removed the side sill, chevrons and the nose were painted with a very fine brush, a 0000 brush. With the help of a magnifying desk lamp and a steady hand the transformation was made.



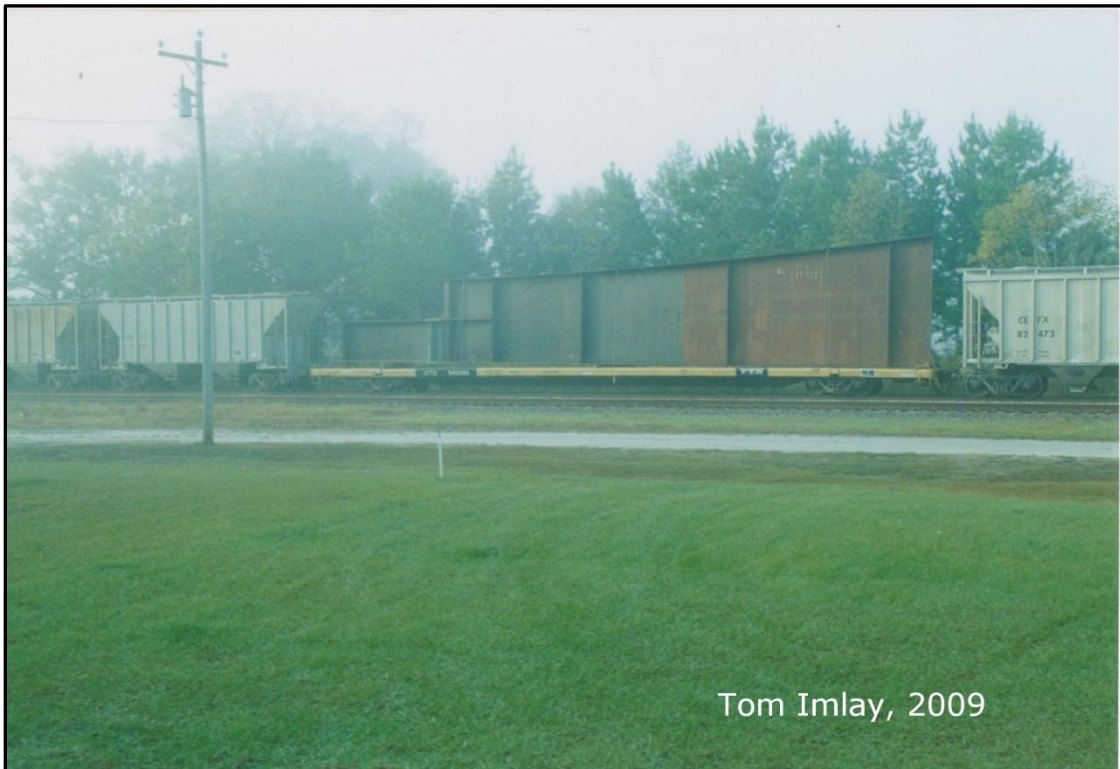
Nice work wouldn't you say?



The Real Deal {FEC Facebook page, original by Dan Simmons}

Part 2 – Extreme Steel Loads – Large I Beam

by Gene and Benita Jameson



A Little History about this Project:

Sometimes you see a loaded railroad flat car go past that just screams to be modeled. A friend of mine took the picture above and showed it to me. One look at the picture, and I had to model the beam. This project shows what you can do when you have a less than perfect picture to work from.

When I started this project, it took on a life of its own! After I started this model, I decided to do two other models; the “plate” steel load and the small I-beam load. We have already covered those. Due to the complexity, this model was saved for last. The other two provide a good warm up before tackling this model.

I have made several assumptions about this load. The only known measurement that I had was the length of the flat car; 89 feet 4 inches. There was only one beam on the train. I have no idea where it was going or where it came from, I am not sure what the beam is to be used for. I assume it is part of a bridge span.

I started by measuring the length of the flat car to come up with a ratio for converting it to HO scale. The picture was smaller than N scale. When I made these measurements, I did not have a digital copy of the picture. After I got the measurements, I drew up the HO scale drawing to work from. After I built the first beam, I got the digital copy and could better see the beam and its details. That is when I found I had made several mistakes with the model because of the bad picture. The major mistake was that the bottom of the beam is not straight; it has an angle that is more than half the length of the beam. There is an HO scale drawing of the beam included at the end of this instruction. Make a copy of the drawing, using the one inch ruler on the drawing to verify that you have an accurately scaled copy. You may need to enlarge or shrink it to get the drawing to be full size HO scale. If you need additional copies, you can find a PDF drawing on my web site, www.b-n-ferrco on the "Modeling/DCC Tips" page.

Materials

Evergreen .030 Styrene #9030	1 per beam
Plastruct 3/32 Angle #90503	1 piece
Plastruct .060 Plastic rod # 90750	1 piece
RustAll	Optional
Micro Scale Graffiti set #90211	Optional
Micro Scale TTX 89' flatcar set #87-579	Optional
Model Master Gunship Grey #1923 (spray)	
Model Master Gunship Grey #1723 (brush on)	
Testors Brown #1240 (spray)	
Testors Dull Coat #1160 (spray)	
Testors Brown # 1140 (brush on)	
Testors Rust #1185 (brush on)	
Model Master #2015 Flat Clear Finish (brush on)	
Scale Coat II CNW Yellow S2035 640-20356 (spray can) 640-20352 (air brush)	
Walthers 89' TTX flatcar #932-40325 undecorated	1 per beam
Kadee #5 couplers	Optional
Squadron Green putty	
400 grit wet and dry sand paper	Several sheets
1/16 X 1/16 X 24 square bass wood	1 piece
1/8 X 1/8 X 24 square bass wood	1 piece
3/32 X 3/32 X 24 square bass wood	1 piece
.015 piano wire	1 piece
Tenax-7R	
Extra Fine Point Sharpie	
Walters Goo	
Walthers Solvaset	
Poster Board	
Super Glue	

Editor's Note: *Between the time this article was first written to the current hobby scene, some of the names of materials and tools have been lost. Specifically paints used in the build, but the replacements are many!*

Tools

Blue painter's tape	
X-Acto knife blades, #11 and #17	Several
Small machinist square	
Small X-Acto square	
Pin vise	
#78, #80 drill bits	Several
NWSL Chopper	
Touch-N-Flow glue applicator	
Exxact Socket tool	
NMRA HO scale gauge	
Postal scales	
Kadee coupler height gauge	
Steel HO Scale ruler	
Dial caliper	
Small file set	
Side cutter	

NOTE: Before cutting the first piece of plastic, **STUDY** the drawing. Read through the instructions and make sure you understand the assembly order. The top and bottom caps are two pieces, not one. Notice the top cap that intersects the 24 inch radius (R2' on the drawing) is made from the vertical brace material. All vertical brace measurements are "centerline" measurements. I refer to the "big" end and the "small" end of the beam throughout this handout. The plastic is .030 inches thick; this is 2 5/8 inches in HO scale.



Let's Get Started!!

Cut out a template of the beam from poster board. Take your time on this step!! Once you have a template, use the blue painter's tape to fasten it to the styrene. Using a new #11 X-Acto blade, scribe around the template. You will have to move the tape to completely scribe the web of the beam. When you have the beam outline scribed, remove the template and mark the beam web with the measurements for the vertical braces. Using the small machinist square, lightly scribe vertical brace lines on both sides of the beam. (Remember, the plastic is only .030 inches thick so go easy on the vertical brace scribing.) On the "small" end of the beam, lightly scribe a line that will extend the top cap below the 24 inch radius to the fourth vertical brace. At this time, the scribed lines on the beam web should look like the pattern on the beam in the line drawing at the end of the instruction. Now cut out the beam web.

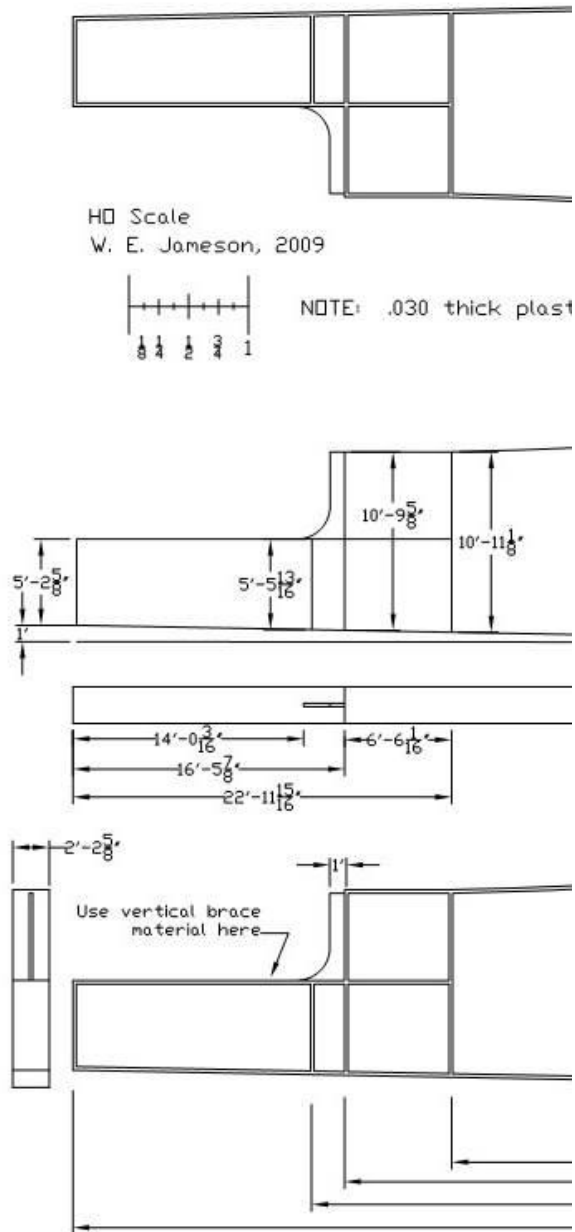


Figure 1

Use the second sheet of plastic to cut the top cap, bottom cap, beam end, and the vertical bracing for the beam. To get all of the top caps and vertical braces the same width, I used my dial caliper to scribe the plastic before I cut it with the X-Acto knife. The top cap, bottom cap and beam “small” end are two feet, three inches wide (cap material). The vertical bracing is one foot wide (vertical material). Cut these pieces the full length of the plastic (12 inch side). Cut two pieces for the top cap, bottom cap, and ends. Cut two pieces for the vertical bracing the full length of the plastic (12 inch side). Also cut one piece of vertical material about three inches long (see Figure 2).

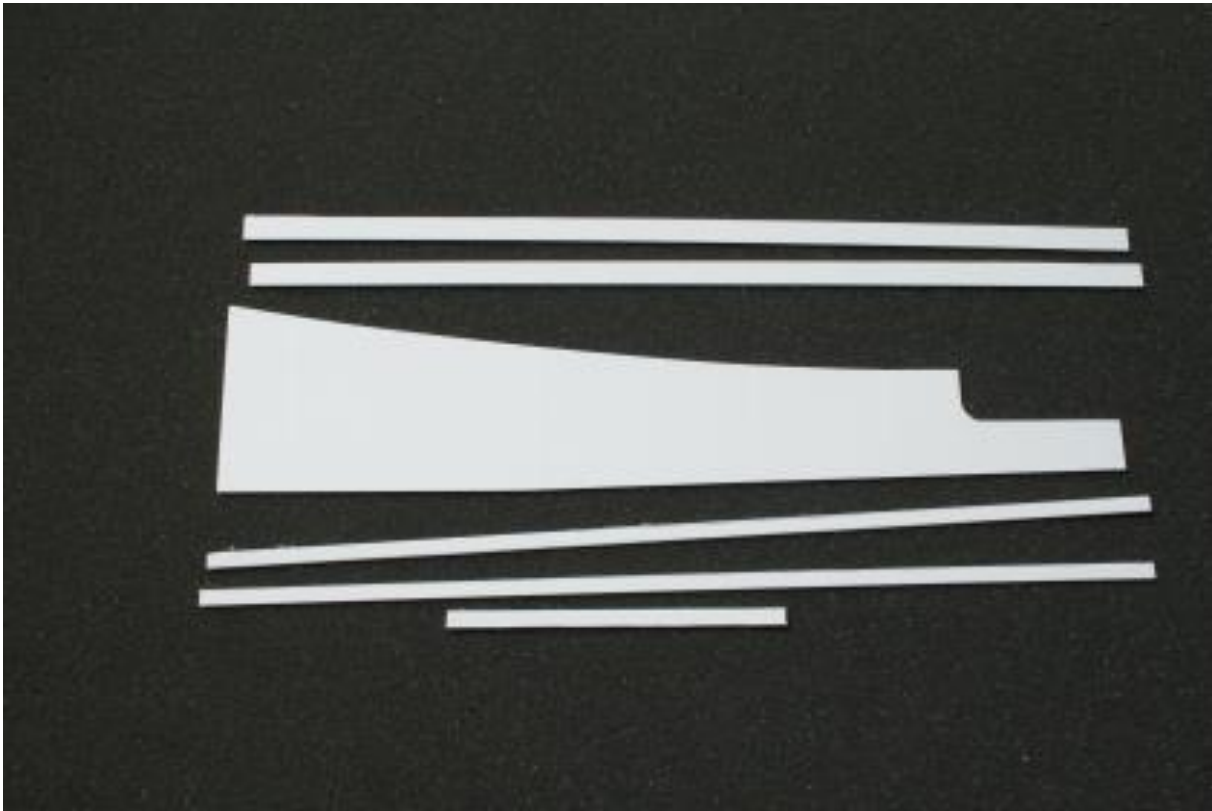


Figure 2

Use the dimensions for the vertical braces, cut these pieces just a bit longer than is shown on the drawing. After all of the vertical braces are installed, file or sand them to the correct length. Extend the vertical brace lines on the drawing and use this as a template to line up the vertical braces on the beam. Use the small square to make sure the pieces are square both vertically and horizontally. If they are not square in both directions it will really be noticeable. Work from the “big” end to the “small” end. Install only the first four vertical braces.

Measure and cut the cap for the top of the small end of the beam from the vertical material. Only install the top cap on the side that you are working on. Fit this to the beam web, flush with the top of the web. Make sure that it intersects the fourth vertical brace squarely. Fit the fifth vertical brace, this is a two piece brace. Fit the sixth vertical brace. The sixth vertical brace does not extend above the top cap. Its center line should line up with the beam end above the 24 inch radius (R2'). Now install the vertical braces on the other side of the beam web following the same procedure. I used several pieces of scrap ¼ inch square plastic to support the

beam web, to prevent damage to the vertical braces on the other side. File or sand the vertical braces to match the edge of the beam web. Make sure the ends are square with the web, or the caps will not fit squarely on the beam.

Using the dimensions for the top cap, bottom cap, and beam end, cut these pieces a bit longer than is shown on the drawing. Install the first part of the bottom cap from the “big” end to the second vertical brace. Make sure the cap is centered on the beam. Test the second part of the bottom cap. File the end of the cap to get a good joint at the second vertical brace. When you are satisfied with the fit, glue it in place, making sure it is centered on the beam. Install the beam end on the small end, making sure it is centered.

Cut a top cap for the flat area over the 24 inch radius (R2'). This cap goes from the fourth to the fifth vertical brace only, not to the end of the beam. When you are satisfied with the fit, glue it in place, making sure that it is centered on the beam.

Cut a top cap to fit between the “big” end and the fourth vertical brace. File the end that mates with the first piece of the top cap installed in the last step to get a good joint. When you are satisfied with the fit, glue it in place, making sure it is centered.

Using the Squadron Green putty, fix any joints that are not perfect. Remember, on the prototype everything is welded and ground down to be smooth. Take your time: anything that you miss will really stand out on the finished model. When you have all the joints looking great, place a full sheet of 400 grit sandpaper on a flat surface such as a counter top and sand the sides of the beam smooth. This will ensure that all vertical braces and beam caps are the same height.

Make a paint mask out of scrap plastic that will cover from the “big” end of the beam to about halfway between the second and third vertical brace (see Figure 3 on next page). The opening in the mask for the beam should be three scale feet high, and a scale 14 feet 6 inches wide. Install a “back stop” that is square with the opening in the mask 37 feet 6 inches from the opening. The “back stop” should be wide enough for the beam to fit in the mask either way and keep it square in the mask. The mask needs to be about a foot above the top and bottom caps on the beam. The opening for the beam to stick out of should be about a scale foot larger than the beam is where it comes out of the mask.

When you are satisfied with the beam, wash the model to remove all oils from handling the model. Let it dry over night before painting. When you are ready to paint the beam, tape off the bottom cap at the “big” end of the beam. To do this, put a piece of blue painter’s tape on the bottom cap. Set the model with the bottom cap on the work surface of your bench and trim the tape with a sharp (new) X-Acto blade. You do not want any paint on the bottom cap where it is going to be glued to the flat car, but you do want the sides of the bottom cap and the bottom cap where it rests on the dunnage (“small end”) painted. Paint the beam with Model Master #1923 Gunship grey.

Once the beam is painted, set it aside to dry for a couple of days. You can work on the modifications to the flatcar. Do not remove the painter’s tape until you are completely finished with the weathering and dull coating of the beam.

Between the second and third vertical brace is a chalk marking “494”, upside down at the top of the beam. Put this on with Micro Scale #90211 graffiti decals. Let the decals dry over night before starting to do the weathering. Do not dull coat the decals at this time.

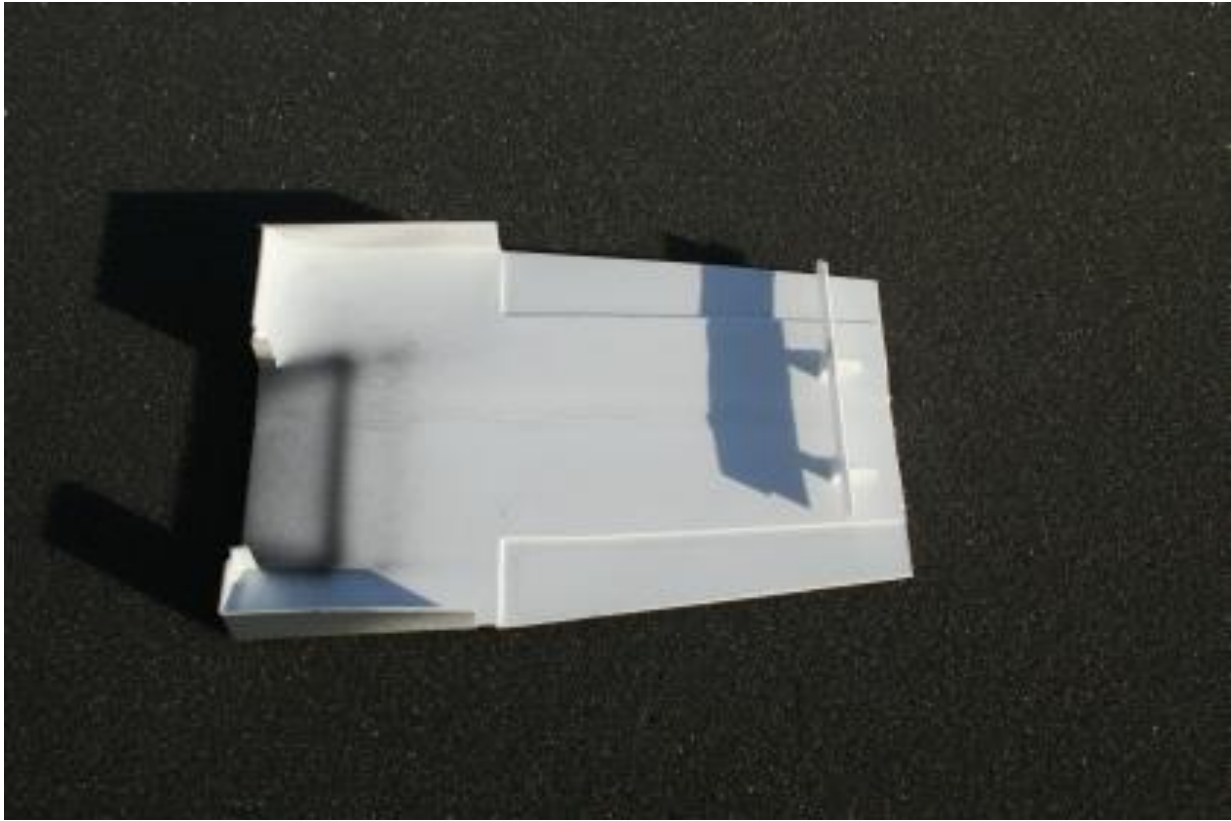


Figure 3

The weathering on this beam is really neat, and easy to do. Put on a heavy coat of RustAll from the “big” end of the beam to about three quarters of the way between the second and third vertical brace. Let it completely dry before putting on another coat. Don’t worry about trying to “feather” in the edge; we will take care of this later. Continue putting RustAll on one coat at a time until you get the effect that you are looking for. Make sure that you get an even coat of RustAll on both sides of the vertical braces. I did this on both sides of the beam, because the effect looks so neat and I did not want to have to keep the car facing one direction at all times. You can use some of the dark brown and black chalks to add a bit of heavier rust areas. I put the chalks in the vertical plane to add to the overall affect.

After you have built the paint mask, put it over the beam. Spray straight down on the beam, making sure to get the top of the top cap, and the top of the bottom cap. Paint the entire exposed beam. This will give you the “feathered” effect on the rust. Once the paint on one side is dry, flip the beam over and repeat the process.

After the paint is completely dry, dull coat the entire beam. After the dull coat is dry, remove the painters tape from the bottom of the bottom cap. Inspect the area where the tape was to make sure that there is NO paint on this area. If you find paint, remove it with fine grit sandpaper.

Modifications to the Flatcar

Remove the trucks from the car. Remove the wheel sets from the trucks and paint the trucks with the Testors #1240 brown paint and set aside to dry. Paint the outside wheel web on the Proto 2000 wheel sets with the Testors #1185 Rust paint. Be careful not to get the paint on the wheel tread or the axle point. Keep the paint off the lip of the wheel, this will leave a shiny rim that makes the wheel look like it has been through the retarders in the hump yard many times. After the brown paint on the truck has dried, spray the truck with Dull Coat and set aside to dry. Use the Exxact Socket tool to ensure the truck has the correct shaped "point" for the axle of the wheel sets. This also gets any paint overspray out of the area where the axle rides. I have found that by using this tool I have improved the rolling qualities of my rolling stock. Check the wheel sets with the NMRA gauge to make sure the wheels match the gauge. When the trucks are dry, install the wheel sets.

Remove the trailer hitches from the deck of the car. Remove the trailer tire "rub rails" from the car deck with a # 17 chisel blade X-Acto knife (see Figure 5).

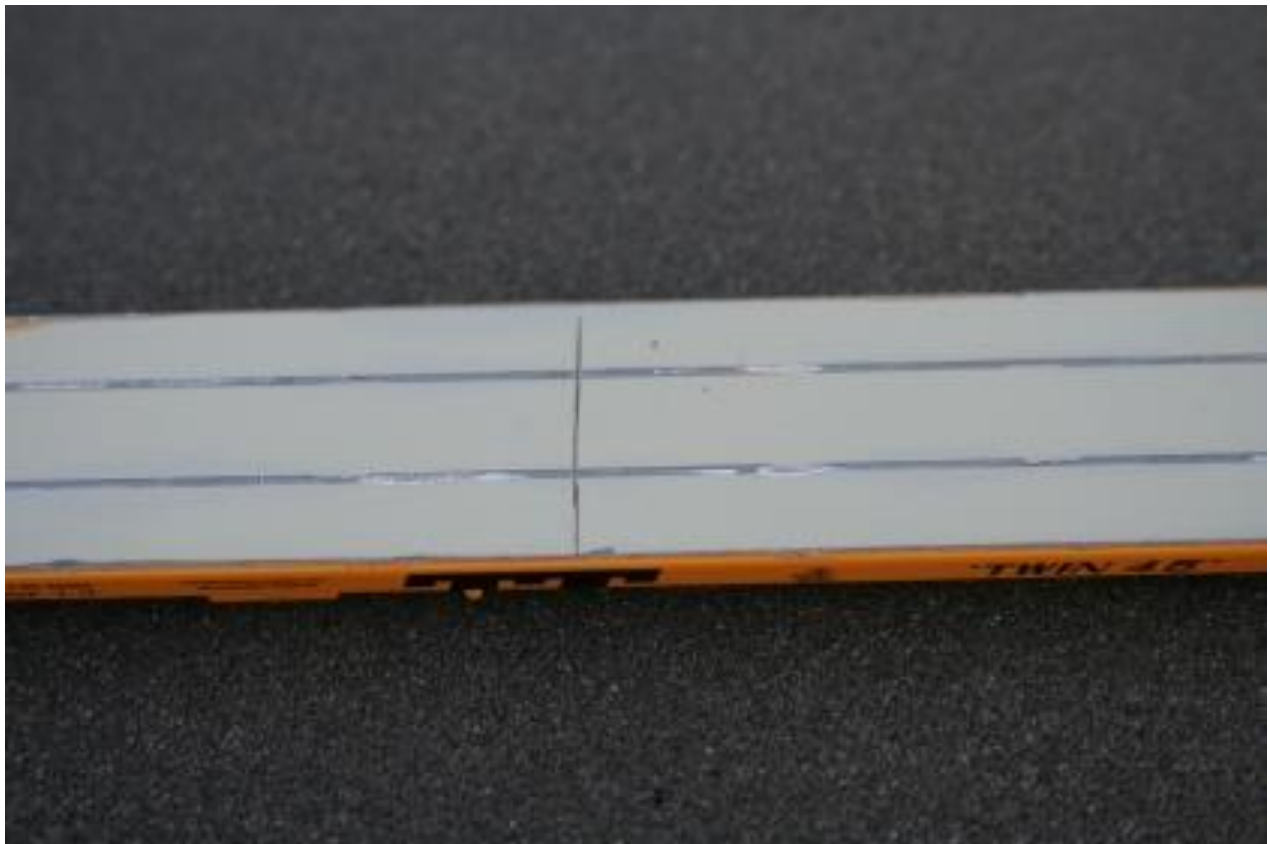


Figure 4

Paint the couplers with Testors #1185 Rust. Be careful not to get too much paint on the hinge area of the coupler.

Use a sharp (new) X-Acto #17 chisel blade remove the large circle on the bottom of the trailer hitch (see Figure 5). Use Tenax-7A to glue the large circle that you just removed from the trailer hitch into the hole for it on the deck. Make sure that you don't push this circle into the coupler area on the bottom of the car. Let the glue dry thoroughly. Use the 6 X 6 square plastic rod to plug the hole in the circle you just glued in. The rod will snugly fit into the center of the trailer hitch circle. Use the Tenax-7A to glue the plug in place. Again, make sure that it doesn't get into the coupler area. If it does, use a #17 X-Acto blade to remove the offending piece. Cut the plug off flush with the deck. File the plug to make sure that it is flush with the deck. Fill any problem areas where the holes for the trailer hitch were and any areas that were gouged when removing the "rub rails" with Squadron Green putty and let dry. Wet sand the deck using 400 grit sandpaper to get a smooth finish.



Figure 5

Use a #80 drill bit to drill the holes for the grab irons. Install the grab irons using super glue. Apply the super glue with a toothpick. Remove any excess super glue with a paper towel. If you started with a painted model, strip the model with Scale Coat stripper, #10568.

After the car has the grab irons installed and all of the damage to the deck repaired, wash the car in warm soapy water, and rinse thoroughly. Let the model dry overnight.

Mask off the sides, ends, and top of the car. Paint the bottom of the car with Testors Brown #1240. Let the car dry overnight. Mask off the under frame of the car, leaving the brake rigging exposed from the brake handle to where it goes under the car. Do not mask off the brake cylinder and reservoir, as these should be painted CNW Yellow.

Paint the car with the CNW yellow. CNW Yellow is a bit lighter than Trailer Train yellow, but it makes the car look a little faded. Let the car dry for several days before you start decaling. If you get yellow on the underside of the car, you can cover this up using Testors Brown #1140.

Several people have looked at the picture of the car, enlarging it, trying to figure out the car number. The reporting marks were easy, they are JTTX. The car number is another story, we think it is 940365. See Figures 6 and 7 for placement of the decals. On my web site (www.b-n-ferrco.com) I have very large versions of Figures 6 and 7 on the "Modeling/DCC Tips" page.

Use the Walthers Solvaset to set the decals. Remove any air bubbles and reapply the Solvaset. Wash the car in warm soapy water, rinse thoroughly, and let dry.

Give the car a good heavy coat of RustAll and let dry. When the RustAll is dry, give the deck a second heavy coat and let dry. When you are happy with the look of the car, give it a coat of Dull Coat and let the car dry.



Figure 6



Figure 7

Mounting the Beam to the Car

There were several assumptions made about how this beam was attached to the flat car. Looking at the picture, I can make out three places where the beam is tied down. The end tie downs have two tie downs, one that goes almost straight down, and one that goes out at a slight angle away from the beam. I assumed that there is a piece of scrap plate steel welded to the top of the beam at each tie down location. I also assumed the beam is welded to the car at the “big” end of the beam.

Use the vertical material, cut three “tie down” plates that are a scale four feet long. Cut 20 pieces of the 3/32 angle a scale two feet long. Paint the “tie down” plates and “angle iron” with Model Master # 1923 Gunship Grey and set aside to dry.

Center the beam on the car, both lengthwise and crossways. Mark the outline of the “big” end of the beam with the extra fine point Sharpie. Remove the beam from the car. Sand the area where the beam is going to sit, removing all paint from this area.

Clean the paint off the top cap of the beam the width of the “tie down” plate at the following locations. About halfway between the first and second vertical brace, about 75% of the way between the second and third vertical brace, and about halfway between the fourth and fifth vertical brace. Glue the “tie down” plates to the top of the beam using Tenax-7R.

Drill a #78 hole in the “tie down” plates on each side of the beam that is parallel. Once you have the holes drilled, glue the beam to the flat car. Give the glue time to dry this is not the time to hurry the project!

Cut a piece of 1/16 X 1/16 X 24, 1/8 X 1/8 X 24, and 3/32 X 3/32 X 24 bass wood six scale feet long. Slide the 1/16 X 1/16 bass wood under the beam. Mark the ends and sides toward the small end of the beam with the extra fine Sharpie. Remove the bass wood. Scrape the paint from the deck where the “angle iron” will be attached. Reinstall the bass wood and glue in the “angle iron.” Repeat this step for the other two pieces of bass wood. See Figure 8.



Figure 8

Working from the “big” end of the beam, insert the piano wire through the “tie plate.” Mark where the piano wire contacts the deck and remove the piano wire. Scrape the paint from the deck and glue the “angle iron” to the deck, once the glue has set on the “angle iron,” reinstall the piano wire through the “tie plate.” Using a toothpick, place a small amount of super glue on the “angle iron” and the “tie plate” to fasten the piano wire in place. Repeat this step until all eight piano wires are installed.

On the “tie plate” between the fourth and fifth vertical brace, carefully drill a second hole on each side of the beam that goes out at an angle. To determine the angle, use a piece of .015 piano wire. You want the wire to attach to the car about a scale six to eight inches from the edge of the car.

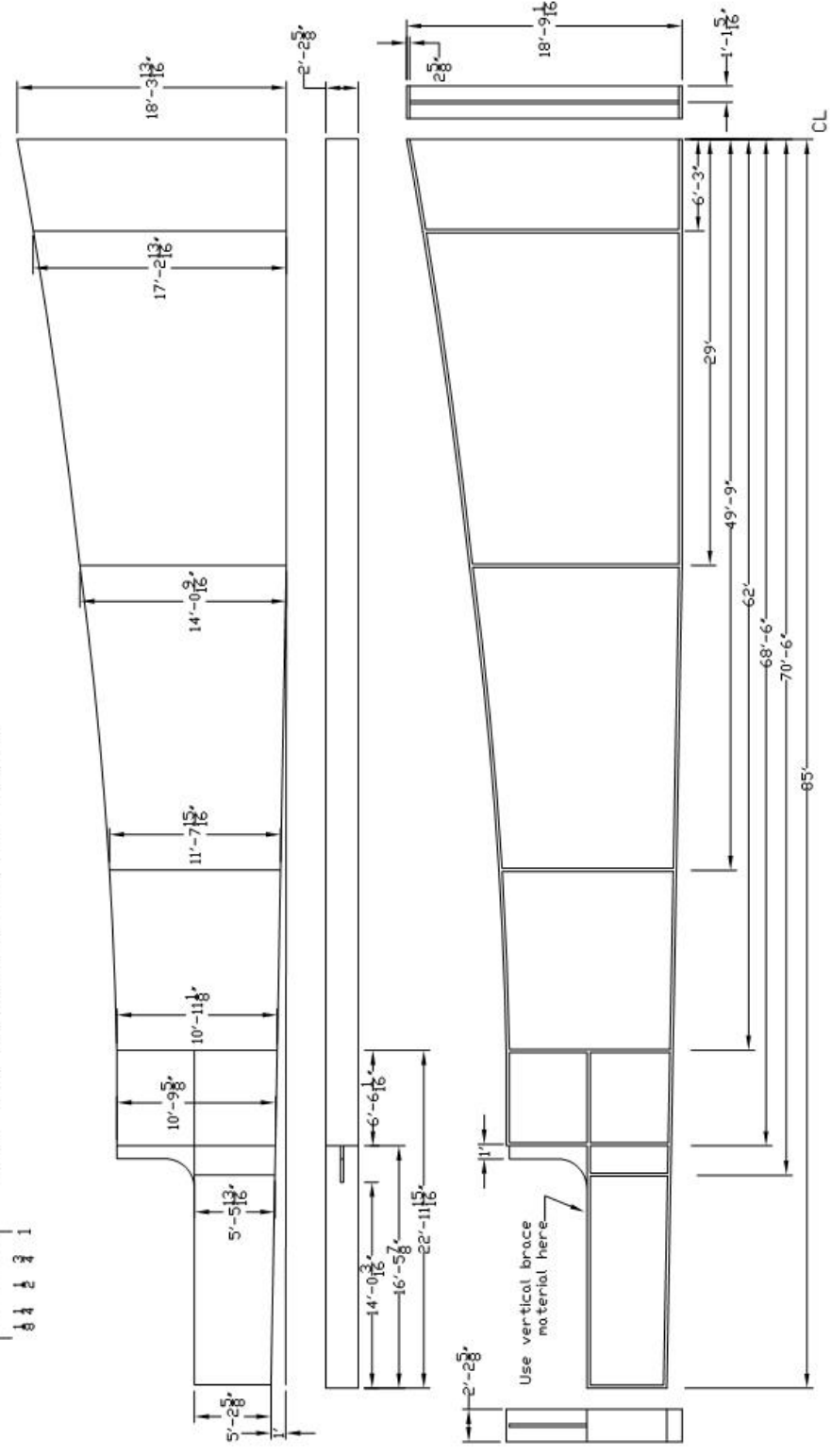
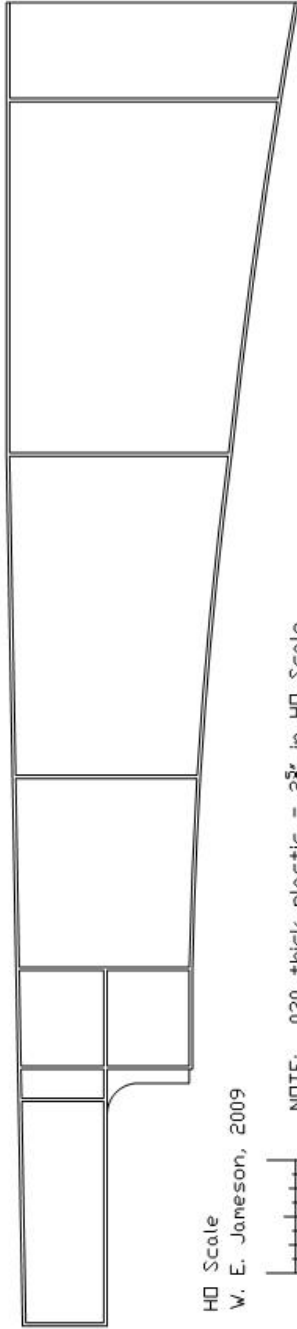
Use Model master #1723, Gunship Grey to paint the piano wire and any white spots caused by drilling the mounting holes.

Use Model Master #2015, Flat Finish to touch up any shiny spots caused by the super glue. You can paint the flat finish around the bass wood to act as a glue to hold it in place. Set the car aside to dry.

Use the extra fine Sharpie to go around the “angle iron” and beam. This is to give the look that the paint has been burned during welding. If the area where you used the Sharpie is shiny, you can spray Dull Coat on it, from straight over the top of the car. Do not get the car to wet with the Dull Coat; several light coats are much better than one heavy coat. See Figure 9 for the completed model.



Figure 9





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Observations

By the time you read this we will be at the end of the year, or into the New Year. Whichever the timeframe, luckily for me a long succession of years, I have been fortunate. This past year, as any year we live, has brought some successes, some victories, some disappointments, and some losses. I look upon one success as getting through the year, granted I had more plumbing installed than previous years, but I am standing upright. Another personal success, the immigration of my second family to Poland, out of the Crimea, getting out before it was too late.

Another success and more to the home of the SSR, the launch of this publication in a digital format. Something that I have been touting for the past 15 or so years, and now it is a reality and hopefully you, the reader, find it a success also. The Journal Box has gone from a publishing, printing, mailing, financial burden to a free look it up on the website publication. As a matter of fact, you don't need to look it up, the webmaster delivers it to you on a quarterly basis along with the Telegraph Key on a monthly schedule.

Victories, for me the renewal of a lease for the South Florida Railway Museum, an extension of the 30 years at the same location. Victories for the SSR, more people participated in this year's elections, hence more participation, more folks are aware, more appreciation for the efforts put forth by the organization.

Disappointments, for me projects that I wanted to accomplish didn't get done, something more important and some less important got in the way. Unfortunately, I have so many projects that a majority of them will never be accomplished, I am too long in the tooth to get everything finished. For the SSR, the missed opportunities of our convention due to storms Helene and Milton, that was a big disappointment. All of the work the two bodied convention committee put forth went for naught. But, the postponement to the coming year will make for a more refined production.

Losses for me, that of the word received that my 1st Sergeant from 50 years ago passed away, along with a couple of others. Closer to the SSR home, the region lost both Bob Gangwish, Lyman Fussell, Keith Williams, and Ray Hazen this year (Ray's memoriam is at the end of this edition). If there were others I missed, my condolences for their family's loss.

All in all, another year that covered all of the bases.

Another observation and this is more hobby related. I see an emphasis on prototype modeling through some of the articles that have been published in this publication and the participation at the RPM at Cocoa Beach. One of our contributors, Bill Cialini, has done some exemplary work in modeling the prototype. To the point of drawing out his own plans, following prototype photos and building the model to both those plans and photos. I believe as modelers we strive for accuracy, we have the ability and the tools to replicate both the rolling stock and the surrounding scenery to achieve miniature reality.

Often you read of modelers looking for the ultimate backdrop, where the road crosses the tracks and disappears seamlessly into the backdrop. Or, the rolling stock has correct brake gear for the age of the car, you can't put AB brakes on a 1919 prototype. The question is how far can we go with this accuracy until it becomes an obsession, how much of a "Rivet Counter" can one be and what are the advantages?

Well, to some the accuracy is important, hence if it were not, there would not be any RPM meets, nor would we have better models! When a modeler documents the list of detail parts that are necessary to capture the realism of the prototype and gets it published, people notice. When at an RPM meet, the model matches the photograph to the color of the paint, correct lettering and the number of rivets, or welds, people notice. The models that are offered today on the market are, in my opinion, a direct product of those who are deemed "Rivet Counters". Without criticisms, admonitions toward manufacturers to improve accuracy of construction,

the graphics and details, we are left with the basics. If it were not for the efforts of these focused modelers, we would still be getting basic “Blue Box” models. In my opinion manufacturers in the past had a mindset, provide the basic model with cursory profile detail, paint it in every railroad livery and you will have sales.

To mind are some of the early Tyco and LifeLike offerings, although some were close, the majority were a one off mold fits all. In particular the Athearn “Blue Box” F unit, every copy had a steam heater, dynamic brakes and horns the size of a tuba. The paint schemes were a stretch (today they are titled “Fantasy Schemes”), especially the Pennsy Tuscan and New Haven McGinnis scheme, of which neither railroad had any of.

So, be kind to “Rivet Counters”, thank them of their curmudgeonly ways, because of them and their ways the quality of what the hobby offers has improved. The manufacturers listened, some begrudgingly, but came to the realization, if they are to survive, they need to change. So, be kind to those who count rivets, they are your friend.

Robert



A view of the ashpit on the Franklin & South Manchester of George Sellios

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The late Dick Elwell's Modeling Skills



U.S. Sugars' Sugarcane Operations

by David J. Leider MMR

The sugar harvesting operations are the primary focus of U.S. Sugar. In June 2008, Florida Governor Charlie Crist tried to buy 187,000 acres of land and all of U.S. Sugar's manufacturing and production facilities for \$1.7 billion and turn the land back to its original marshland state. The company resisted and won, but realized it needed better community relations. The Sugar Express was instituted to educate the public on the importance of U.S. Sugar to the Central Florida economy.

Every year the company plants, harvests and processes sugarcane into about 850,000 tons of refined sugar, making the company the country's largest fully integrated producer of sugarcane and cane sugar. The company is a major contributor to Florida's economy, providing more than 19,000 jobs and nearly \$4.7 billion a year in economic activity.

Sugarcane is a giant grass that thrives in South Florida's sunshine, abundant rainfall and fertile muck soils. Each stalk is more than 70% water and the remainder 10-15% sugar. It has a 12-15 month growing cycle and is planted annually between September and January and harvested between late September and late May. After harvest, the plant regrows, some for as many as 15 cycles. Tests are taken in each field to measure sugar content and to determine when a field needs replenishment. Once the cane is removed, the soil is usually rotated with other crops to allow the fields to rest.



Cane fields being burned in the distance. A special EPA permit is required before any field is burned. Notice the dark, muck soil in the foreground, good for growing.

Harvesting begins in the fall. The goal is to burn, cut and process the cane in eight hours. Before harvest, a field is burned to remove much of the leaves and non-essential plant material. Smoke covers several miles when a field is burned. Once the fire subsides, mechanical harvesters go through the field and cut the cane at the base and chop it into 8-12" sections, which are put in carts to take to the railhead.



Dump Ramp

Tractors hauling cane transporters drive up the ramp and dump their contents into waiting cane cars. The ground is littered with pieces of sugar cane. On the above picture, notice the lights for night operation. I was told that cutting cane was a 24-hour operation.



Portable Unloader

Cane transporters discharge their loads into the conveyor hopper. The cane travels up the conveyor and is dumped into the cars.



Permanent Unloader

This also uses a conveyor to get the cut cane into the cane cars.



Two of the cane hauling cars are seen next to a tractor hauling cane from the fields.



Two full cars ready to be moved. It is easy to see the heritage of the left car.

I saw two types of loading facilities, permanent and portable. Strings of empty cane cars were spotted at the sidings. The cars were an interesting mixture of old high side gondolas, modified with mesh panels at the ends. The trip from the field is not far, so the cars were piled high with cane. Droppings were everywhere. Once a field is cut, the cars are picked up and sent to the refinery.

Cars on the west and south sides of Lake Okeechobee are taken directly to the refinery in Clewiston. Loaded cars on the east side are taken to Byrant Yard near Pahokee, where they are combined to make longer trains to Clewiston. This movement is referred to as the Byrant Turn. Byrant Turn trains must be backed out of the yard before heading south and west. During harvest time, Byrant Turn trains can run as often as every four hours. All of this requires tight coordination. I was told that U.S. Sugar operates the largest high-speed 5G Internet network in the world.



US Sugar's Newest Color Scheme

Some say it is because they are buying John Deere tractors. **{Editors Note: The scheme is very reminiscent of Seaboard's freight scheme of the 60s.}**

Refined byproducts such as sugar crystals and molasses are shipped from the refinery by rail to interchanges at both ends of the line. Chemicals used in refining sugar are also brought to the refinery by interchange. SCXF's western terminus interchanges with CSX on their Auburndale Sub in Sebring, and the eastern terminus in Fort Pierce interchanges with FEC. The SCXF also has haulage rights with the FEC to Jacksonville to further interchange with CSX and Norfolk Southern.



Tractor Working the Field

Part of the huge sugar refinery can be seen in the background.

Prototype Modeling PMing 3

By Mike Brock

{Editors Note: Part 3 is a continuation of Mike's approach to achieving a prototypical operation in both looks and feel of his N&W outlook.

When I reported last, Marty and I have been run out of Schaefer's Crossing by the 1949 N&W railroad police, Lou Ullian was still trying to communicate with a local in Christianburg and we could all hear hooter whistles from down in the holler (valley to you flatlanders) as we would refer to a car from Florida and them hills in Tennessee back when I was at Ridge Runner. Now I'm a flatlander. Anyhow, finding all this to be worth reliving ,, long coal trains snaking their way through the valleys ... oops, hollers ,, and up ridges as they try to penetrate the Blue Ridge on their way to Norfolk and waiting cargo ships. I also felt that to do the job right meant only one thing. Steam!

This plan is one way to model parts of the area between Roanoke and Lynchburg, VA. We will do the west end of Roanoke toward Schaefer's Crossing, and we'll do a few locations on the main line from Roanoke to and including the Montville where eastern staging will begin. Western staging begins west of Roanoke. As time goes on, we will take a look at doing this project in a double deck form.

Before we go further though, perhaps some regression might be in order. During Prototype Rails 2003, we had a panel session during which about six of us having prototype based layouts were asked how much percent of a layout's concept was applied to scenery and how much to operations. John Wilkes, noted for both, gave an answer that I thought was right on the button. As I recall, he remarked that a layout ought to look like the prototype and it should act like it. In other words, 50% to both. Words that I can live with, so we'll apply that to our planning.

As we decided in Part 2 (actually, I decided, I guess. Well, it's my article after all), we'll have the one large yard ... Roanoke. It was the nerve center of the N&W, corporate headquarters was even located there. It was a major yard ... coal arriving from mines to the west and being directed east to Norfolk and the sea, north up the Shenandoah Valley and smaller amounts south into North Carolina. Primarily, though, coal traffic is eastbound, lots of it, so we'll need power. The success of this venture will be to produce an accurate impression of the real thing as possible without making demands on a therapist. Thus, we'll definitely be running doubleheaders. We can't do this without hearing hooter whistles, of course, sound effects will be required. DCC with Soundtraxx or QSI depending upon your choice of engine.

Perhaps we should see how much of an operation our plan will permit. Lower staging (west of Roanoke) and upper staging (east of Montvale) both must be capable of holding six trains. Seven would be better but we'll go with six. This means we'll run about 14 trains during a session. Of those, eight will be coal, four loaded, four empty. We'll run two merchandise trains ... Hot Shots ... three passenger trains and a local freight. The merchandise trains, # 99 westbound, arrived at Roanoke sometime in the noon period and # 86 eastbound, arrived at Roanoke not long afterwards. The local served industry is located at Vinton, Blue Ridge (including the stone works, which is still there) and Montvale. One of the more interesting operations of any railroad was the unique technique used by N&W on loaded coal trains eastbound up to 1.4% Blue Ridge grade. As I outlined in Part 2, two "Y" class engines [2-8-8-2] on the front and one on the rear, would drag a load of coal upgrade to the summit at Blue Ridge. The helper would drop off there, and head back down to Vinton, the lead engine would take the train downgrade to Montvale, tie it down, and run light back to Vinton. Another coal drag would leave Roanoke with a Class "A" [2-6-6-4] on the front followed by a class "Y" [2-8-8-2]. At Vinton, another "Y" would be added on the rear.

This train would run to Blue Ridge where the rear helper would be dropped ... it running light back to Roanoke. The coal drag would head on down to Montvale where it would pick up the tied down cars and both engines would then take the combined train east ... in our case into staging. This all happens of course, while westbound trains roll by on the westbound tracks. Helpers returning to Roanoke would have to fit in between west bounds. No unrealistic 60 mile per hour switching moves on this railroad! Loaded coal trains would run at about 15 mph, top speeds on "Y" engines running light would be about 35 mph. The task of operators would be to manage three independently operated engines without spilling precious coal all over the landscape. Locals were known, after all, the heist a few lumps from halted hopper cars. Empties heading back would be led by class "A"s sometimes double headed with a "Y". The merchandise trains would be led by a single "A". Passenger trains would be pulled by a "J" [4-8-4] and the way freight would get a "Y".

We'll model passenger train # 4, the Pocahontas, which was scheduled to arrive at Roanoke at 11:30 AM eastbound, leaving town after a 20 minute station stop. Added to that, the Southern's Tennessean running on N&W tracks between Lynchburg and Roanoke operated over our tracks, (behind class "J" engines of course) arriving westbound at 1:30 PM and eastbound at 2:30 PM. It would include both Southern and N&W cars and maybe even a Pennsy sleeper. As is obvious, operations will be rather complex even without multitudes of way freights wandering around switching local industries.

Make no mistake, this was not a quiet railroad, and my railroad likewise will produce noise. Operators sensitive to such can bring ear covers. Having spent some time at trackside in the area ... with just one "J" or "A", it was loud! Sitting in a dispatcher's office in Roanoke and being aware that coal drag extra X1223 was heading up toward Blue Ridge and will pass # 99 westbound is one thing. Being trackside and watching and listening to 10,000 horsepower of steam locomotives working full out on the head end of X1223 as # 99 hurtles by at 50 mph creates quite another sensation and I favor the last. So, yes, we'll be using the sound systems available.

Scenery for this layout will be a bit challenging. Just modeling rocks, sagebrush, weeds, and a few smallish pine trees (as in Wyoming) won't work for Virginia. Thus, we'll either have to make about 47,000 individual deciduous trees or, perhaps, use 300 or so individual trees in front of individual globs of tree material representing the tops of trees. I favor the latter. We'll have to make sure all of the tops are not identical, of course. We'll also make judicious use of photo backdrops. The nice thing about such is that ridges in Virginia look just like those in Tennessee, northern Georgia, or even Pennsylvania. Hence the photo of one in Tennessee can be easily used for our Virginia layout. The concept is to put the backdrop in place and model foreground scenery such as that it ends just an inch or two from the backdrop. If we want to create an impression that 3D scenery transitions immediately to the backdrop, we will need to make sure the individual trees match in size and color of those on the backdrop. The size we use will be dictated by how far away from the viewing site it resides ... and how far away we wish the trees (and other objects) on the backdrop to appear. Illusion can be fun.

Next time we'll see if Marty, Lou and I have any more troubles up in Virginia and we'll take on the task of redesigning Roanoke yard. We'll also take a look at some of the structures we'll need. Maybe we can get Gail to help out she really captured the look of Appalachia in her work on her layout, I should know I've lived in East Tennessee for 19 years.

{Editors Note: We'll be back next quarter with the final segment, Part 4}



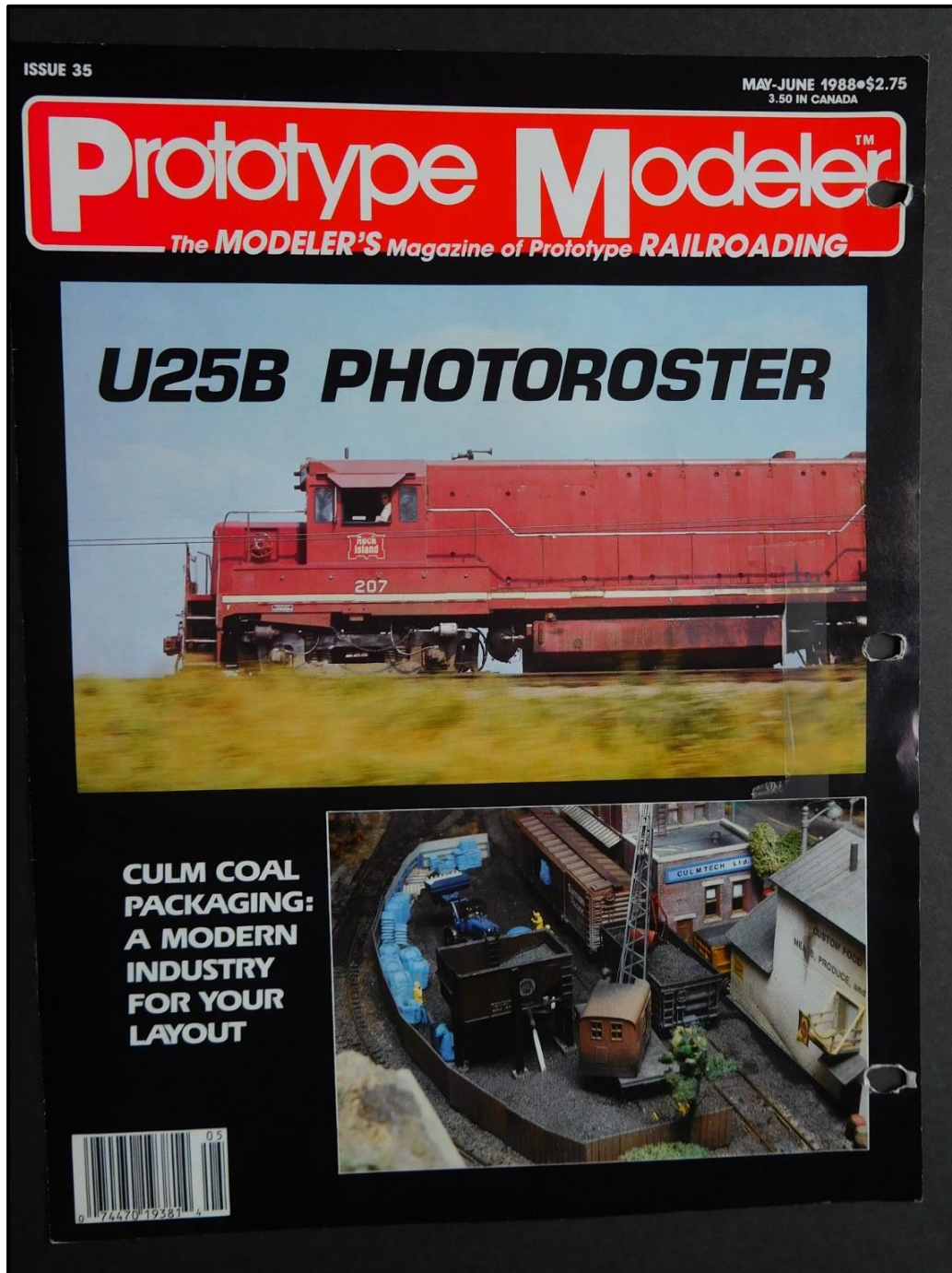
South River Model Works "Delabarre Woolens" on Bob Van Gelder's Layout



Another angle of "Delabarre Woolens"

Culm Coal

by Michael Collins MMR



{Editor's Note: Here is another of Mike's previously published articles, this one dating back to 1988, did I once say Mike is old? Anyway, this one is based on building a business on your layout that has a basis of reality, especially if your layout is located in coal country. Mike provides a running narrative that goes along with the printed pages. I will let the pages speak for themselves, luckily one can zoom in to enlarge the page and read.}

CULM COAL



Surrounded by culm banks accumulated from generations of coal mining, Culmtech's modern processing building in Inkerman, Pa., turns waste material into a valuable product. Much of the processed culm coal is

shipped to a nearby packaging plant that the author has reproduced in model form on his layout.

Modern technology has turned this waste product into a valuable commodity supporting a thriving industry. We'll show you how to model a culm coal packaging plant for your 1980s layout.

Today, in some of the coal mining areas of the country, a new industry has been born based on "culm" coal. Culm is the refuse part of mined coal, the residue left over from grading and washing processes. For years, culm was piled into mountainous heaps around the colliery (a coal mine and its connected buildings); these "culm banks" were composed of coal, shale, rock, silt (pulverized coal) and dirt. There were few practical uses for the waste culm. It was not economical to extract the tiny coal pieces mixed in with the other material. Culm was sometimes used as landfill or canal fill, and some locomotives with large fireboxes (like the camelback) could burn culm coal, but there was little demand for this waste product and the culm banks grew as coal processing continued.

Today the story had changed. Rising energy costs have forced government agencies and private industries to

BY MICHAEL J. COLLINS
PHOTOGRAPHY BY THE AUTHOR
EXCEPT AS NOTED

search for alternative fuel sources. The search led them to the culm banks which were energy storehouses just waiting for somebody to apply the right technology and entrepreneurship to turn them into a valuable resource. Culm, or its by-products, is now being used as fuel in some power plants and industrial furnances. Fine coal is burned on moving grates or is ground to a powder, sprayed into the combustor by means of an injector and ignited. The fine carbon reclaimed from culm is used in industrial filters for pollution control, in the manufacture of gun powder and wherever graphite material is needed.

How culm is processed

To convert the piles of waste materi-

al into a usable product, a coal processing "factory" must first be built at the culm bank. These facilities include a modern structure which resembles the distinctive "breaker" which is commonly associated with collieries. These modern buildings are smaller, have fewer windows and are often brightly colored.

The culm is moved to a conveyor at the plant by large bucket tractors; the conveyor lifts the raw culm into the processing building. Inside, the coal is separated from non-coal material, then ground to the desired size. Bulk quantities of the finished product are shipped from the plant by truck or by railroad hoppers.

Significant amounts of the product are sold to companies who package the culm coal and sell it to customers who need only small quantities. The packaging plants often use an existing building, such as an abandoned factory, not far from the processing plant.

PROTOTYPE MODELER

Here is your opportunity to learn about it; and how it is used and transported. Since I'm from the anthracite region of Pennsylvania, I modeled a prototype culm product packaging plant



Carbon Sales in Miners Mills, Pa., has converted an abandoned flour mill into a culm coal packaging plant. This view features the building in which the 100-lb. sacks are packaged. Note the conveyor which carries coal from the truck dumping pit into the building. In the foreground are maintenance vehicles belonging to the Pocono Northeast Railway.

An overall view of Carbon Sales facility. Left to right the buildings are: supply warehouse; one-ton bag packaging building; (in background) 100-lb. sack packaging building; storage and loading building (with a boxcar ready for a load out front); and office. Notice the heavily weathered state of all the buildings.



PNER 77 is out of commission (permanently) near the Carbon Sales plant. In the background is another view of the facility with the storage and loading building in the center of the photo. Modelers should note such details as the conveyor servicing the one-ton bag packaging building, the abandoned brick stack at right and the pile of wood pallets waiting for stacks of packaged culm coal.

The product is bagged in two sizes: giant one-ton nylon bags and smaller 100-pound sacks (which are stacked on pallets after being filled). Bags are filled either inside the building or in the yard using either a permanent loading facility or a portable loader mounted on a trailer or a truck. After bagging, the culm coal is either put in storage or shipped off immediately.

Large orders of packaged culm coal usually travel by rail. The sacks are loaded into DF (damage-free) double-door boxcars. Forklifts, both large and small, handle the skids of 100-pound sacks. The giant nylon bags have two large loop handles. These one-ton bags are moved from storage to boxcar by a front-end loader using the tines, or special hooks on the bucket, to lift the bags by the handle. Once a load is in a boxcar, a small forklift (with its forks turned upside-down for ceiling clearance) will stack the bags. After the loads are stacked, movable walls or



A busy day at Carbon Sales. With numerous 100-lb. sacks waiting nearby, a front-end loader transfers a one-ton bag to a double-door boxcar. Inside the car a forklift positions the loads for transit. At left, a truck dumps a load of processed culm coal from the Culmtech plant into a bulk storage pile.

When coal is mined, a building called a *Breaker*, separates bits of rock, dirt, slate, and shale from coal and the part that did not develop into 100% coal (it needs more time and pressure*) ... that "coal stuff" (technical word) and the remanence of breaking coal into different sizes is dumped in piles called '*culm*' banks. For years they just sat with bushes and trees growing out of them. An eye-sore that was accepted by the community.

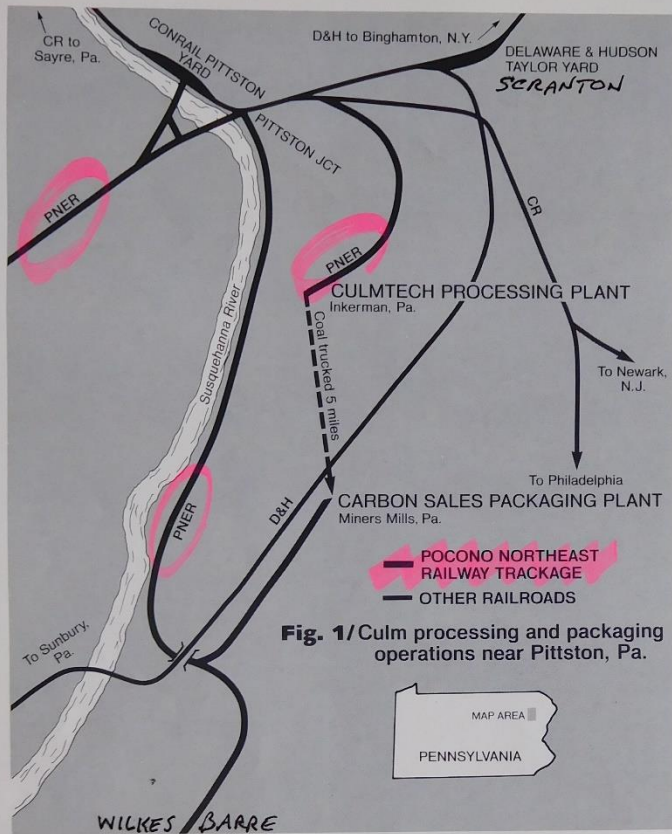


Fig. 1/Culm processing and packaging operations near Pittston, Pa.



When a switcher is not available, Carbon Sales moves boxcars using a front-end loader which sports a coupler. Here, the front-end loader is about to move a boxcar filled with packaged culm coal away from the storage and loading building so that it can be handled later in the day by a PNER locomotive.

restraining bars are locked in place to keep the load from shifting in transit.

Prototype culm processing operations

The prototype for my model of a culm processing and packaging operation can be found in the Wyoming Valley of northeastern Pennsylvania near the town of Pittston, between Scranton and Wilkes-Barre. Figure 1 is a map of the area and shows the geographical relationship of the plants and shows how they are tied into local rail lines. Both the processing and packaging plants are served by the Pocono Northeast Railway (PNER), a short line headquartered in Exeter, Pa., which operates over former Lehigh Valley, Erie Lackawanna and Laurel Line (Lackawanna & Wyoming Valley) trackage.

The PNER, which was founded in 1982, has been plagued with poor track conditions and protests from citizens concerned about the safety of railroad operations; the state has pledged money to rehabilitate the right-of-way so that the PNER can continue to serve its 21 regular and 20 occasional customers. The PNER owns four locomotives. Two, GP9 1751 and SW1 601, sport the PNER green-and-yellow paint scheme, while ex-Conrail NW2u 87 still sports CR blue livery. The fourth locomotive, ex-Montour SW9 77, is not in operating condition and is used strictly for parts.

Culm is processed at the Culmtech plant near Inkerman, Pa. Culmtech built a modern processing structure amidst the towering culm banks overlooking the Susquehanna River. Three times a week, about 20 hoppers of processed culm coal are shipped out via the PNER to either Conrail's (ex-LV) Pittston yard or D&H's Taylor Yard in Scranton, Pa. From there the coal is routed in all directions, some to power plants on-line and some destined for customers overseas (in Europe and Asia).

A portion of the processed culm is trucked from Culmtech to the Carbon Sales packaging plant five miles away. Carbon Sales occupies a former flour mill in Miners Mills, Pa. Figure 2 shows the compact plant layout, which includes five buildings. Two of the buildings are devoted to the actual packaging process, with one building handling the filling of 100-pound sacks and the other the filling of one-ton bags. An office, a supply warehouse and a storage and loading building (where rail cars are loaded with the bagged culm coal) complete the roster of structures.

The PNER serves the plant on an as-needed basis, routing all loads to the CR Pittston yard. Carbon Sales generates about eight boxcar loads of bagged culm coal each week.

Right: Some 100-lb. sacks are filled in the yard of Carbon Sales using a portable Kustom Kar loader. Without too much work this device can be modeled by creatively combining a variety of easily obtainable detail parts. **Below:** If you are considering modeling an on-line customer for bulk processed culm coal, you might want to use a portable hopper unloading conveyor. This hopper of processed culm coal (probably from Pennsylvania) was photographed as it was being unloaded in Austin, Texas. The product is trucked from the unloading facility to a nearby sewage treatment plant where it is used for water filtration.



MMR... Cyril Durrenberger

Modeling a culm packaging plant

I decided to model a culm packaging plant since it has more outside activity than a processing plant and requires less room. The main structure for a packaging plant can be any "generic" factory or warehouse model, either a modern corrugated building or an older brick one, such as the ex-flour mill used by Carbon Sales. I used a Design Preservation Models Cutting Scissors Co. building for my Culm Tech (my modeled packaging company, based on the prototype Carbon Sales but borrowing and slightly modifying the portotype Culmtech name) structure. I added a variety of extra details which not only made the

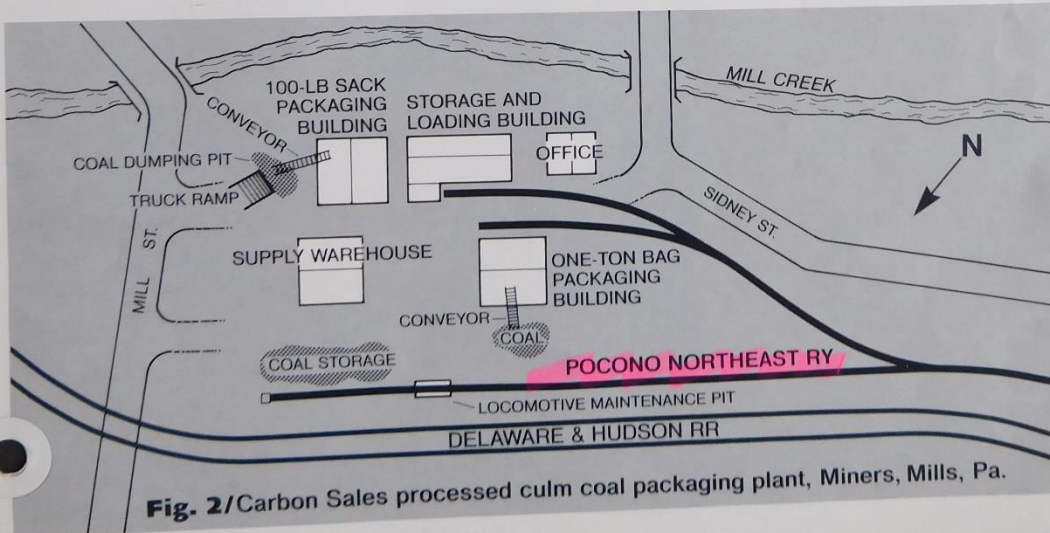
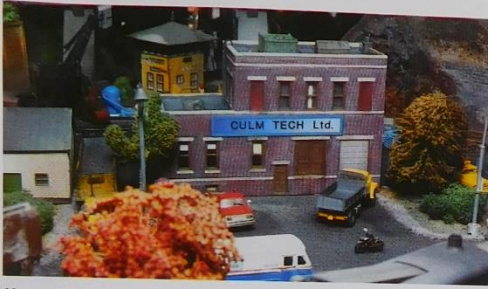


Fig. 2/Carbon Sales processed culm coal packaging plant, Miners, Mills, Pa.

{Editor's Note: I believe the industry is minimized these days considering the processing of coal is an environmental hot point and to a degree a hazard. But, for those modeling coal hauling in the 60s, 70s and 80s this is the space filling and operations route to take. There are culm piles around today, but the majority are being revitalized. Another name for culm is gob, or boney, ... I don't know why.}



Above left: The front of the Culm Tech packaging building on the author's layout. The structure is a Design Preservation Models building with a number of detail parts added for realism. **Above right:** This view of the Culm Tech model shows the yard behind the main building complete with a crane for transferring bulk culm coal, a bag loader made from an Athearn hopper and a truck dumping a load of processed culm coal.

building look more realistic, but also gave it a "re-claimed" look as if it were an abandoned factory that had been renovated for this new purpose.

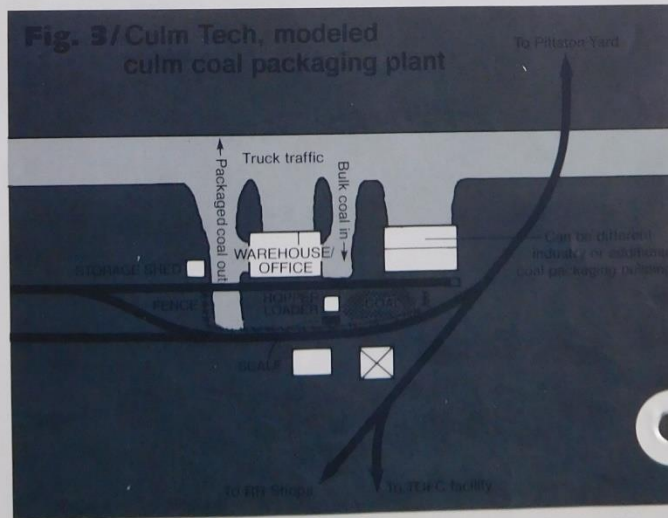
Rather than "hide" most of the bagging activities inside buildings (such is the case at the Carbon Sales plant), I wanted to have more work done out in the open on my modeled version. One-ton bag loaders can take the form of modified hopper cars which have exceeded their useful lives on the rails. I modeled a hopper loader using an Athearn 34-foot twin-rib side hopper. I cut the hopper in half, closed the open end with styrene and raised it on steel beams (actually styrene structural pieces). A number of details, including concrete footings, a mesh screen and a ladder, were added; the hopper was weathered heavily before adding to the modeled scene.

Carbon Sales fills some of its bags using a portable, trailer-mounted loader manufactured by Kustom Kar. You could model this using an Athearn 25-foot van trailer with a suction-pressure container from a Preiser container kit mounted on it. Portable loaders are also mounted directly on flatbed trucks and this is the type I included with my model. I reproduced this specialized piece of equipment using a Wiking truck cab, a diamond treadplate made by The Parts Department, a Preiser suction-pressure container and a selection of detail parts.

A number of other items are needed to round out the scene at a modeled culm packaging plant. A dump truck or trailer can be positioned for delivering loads of processed culm coal. I included a crane for handling piles of coal delivered by truck and for unloading gons with incoming processed culm arriving by rail. I modeled this using a Walthers 25-ton crane with a Stewart clamshell bucket. A couple of



In the Culm Tech yard a front-end loader fills a boxcar with one-ton bags while a forklift loads the smaller sacks onto a truck for a local customer. In the background at right is the author's modeled portable loader and the ex-hopper bag loader, in the foreground at left is the small storage shed.



PRINTER ERROR

PROTOTYPE MODELER

Coal, given a few million more years underground becomes diamond, hence, the Lehigh Valley connection re its passenger train, the *Black Diamond* (see the 2023 NMRA Calendar, December).

BILL OF MATERIALS CULM COAL PACKAGING PLANT

Structure

Design Preservation Models:
No. 103 Cutting Scissors Co.
Alloy Forms:
No. 2016 20-ton roof air conditioner
Builders-In-Scale:
No. 501 Ribbed seam roofing material
Cal-Scale:
No. 304 Pyle light
Campbell:
No. 255 Brass light shades
No. 909 Skylight
Central Valley:
No. 1601 Fencing, ladders and stairs
Chooch:
No. 7121 Electric meter

Hopper Loader

Athearn:
Nos. 5441-5446 34-foot twin rib side hopper
Evergreen:
No. 9020 Styrene (.020")
Plastruct:
No. 102 Angle structural shape
No. 204 I-beam

Portable Loader

Athearn:
No. 1425-1431 25-foot van trailer, or
Wiking:
No. 16671 Dump truck
Preiser:
No. 1152 Container kit
The Parts Department:
No. 125001 Diamond treadplate
Cal-Scale:
No. 247 Poppet valve
Detail Associates:
No. 1901 Air vent
No. 2105 Spark arrestor
Details West:
No. 158 Air conditioner
Lee Town:
No. 3051 Gas tank
No. 3091 Air cleaner
Micro Scale:
No. 273 Signs for industry
Plastruct:
Nos. 603-604 Round tubing
No. 2603 Reducer
SST Ltd. (now Finestkind Models):
Nos. 2194-2196 Pipe and valves

Crane

Walthers:
No. 5501-5509 25-ton crane
Stewart:
No. 201 Clamshell bucket
Cal-Scale:
No. 304 Pyle light

Other items

AM Models:
No. 104 Jennysville shanty
Electrotren:
No. 7 Cotton bales
Highball Products:
No. 134 Coal dust
Kibri:
No. 10002 Forklift
No. 10208 Front-end loader
Scale Scenics:
No. 5002 Pallets
SST Ltd.:
No. 2031, 2126, 2127 or 2350 Sacks
Wiking:
No. 12659 Forklift
No. 16651 Front-end loader
Woodland Scenics:
No. 76 Fine cinders

forklifts will be necessary as they are used to load the stacked 100-pound bags into the boxcars. Wiking, Kibri and others offer appropriate models. Remember to turn the fork prongs upside-down on the forklift working inside the boxcars.

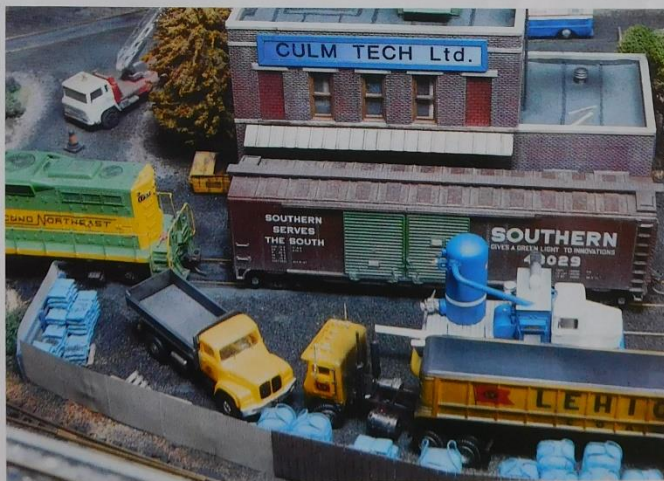
A front-end loader is an essential piece of equipment at culm packaging plants. As mentioned earlier, front-end loaders are used to carry loaded one-ton culm coal bags and they are also used to move unbagged coal around the processing site. Carbon Sales also uses their front-end loader to move rail cars when a switcher is not available. The backside of the loader is equipped with a coupler, and with it single cars can be moved to or away from the dock at the loading building. Both Wiking and Kibri offer front-end loaders and a dummy coupler can be attached to your model.

The bags and sacks which result from the packaging process are an essential touch of realism for your culm processing plant. For 100-pound loads, I used Scale Structures Ltd. sacks. The loaded sacks are piled on pallets manufactured by Scale Scenics. The one-ton bags were reproduced using Electrotren cotton bales; cord handles were attached and the bales were dipped in paint (the company colors) and allowed to dry overnight. Cut open some of the dry, painted bales. Remove the cotton and wood block from a couple and place them on your layout as empty bags waiting to be filled. On two

or three others, remove only a small amount of the cotton, leave the wood block and glue some coal dust on top to represent recently filled bags waiting to be sealed.

To complete the scene I added a number of other details including a fence, tools, barrels, a scale, lights and work-

ers. Culm processing is not a clean industry; you'll want to weather all structures and equipment appropriately and a liberal application of coal dust and fine black cinders is encouraged. Storage piles of coal can be recreated using Woodland Scenics' ballast material.



At the end of an operating session the PNER Geep replaces a loaded boxcar at the Culm Tech plant with an empty one; the same procedure happens at the end of each work day at the prototype Carbon Sales plant.

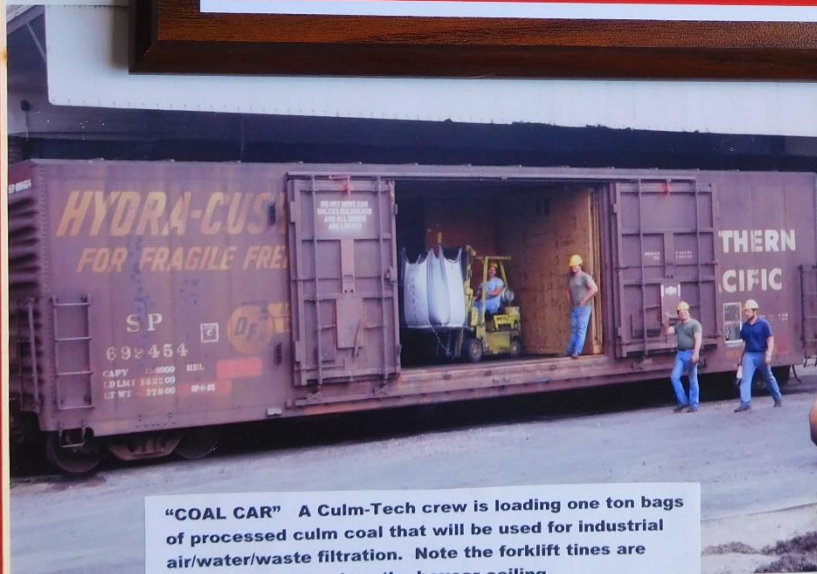
Taking pictures for this article made workers wonder what I was doing since the area accumulates coal dust ... dirty and if ignited could be dangerous.

National Model Railroad Association
Photo Contest

First Place
Prototype Slide



NMRA75 2010
Milwaukee, Wisconsin



"COAL CAR" A Culm-Tech crew is loading one ton bags of processed culm coal that will be used for industrial air/water/waste filtration. Note the forklift tines are turned around to clear the boxcar ceiling.
Miners Mills, PA July 1986 Printed from a 35mm slide

Mike's Prototype picture of the operation wins in Milwaukee

Heat Exchanger

by Michael Collins MMR

{Editor's note: Here we have another of Mike's past articles, this one only ten years of age, dealing with a High & Wide load. As can be read from the original article in Railroad Model Craftsman, it first provides history and use of heat exchangers and then Mike's rendition and article. As modelers we sometimes need to think outside the box, or beyond the envelope and utilize oft times odd shapes to get our point across. Mike did just this by taking one of the Revell models Atlas rocket kits (remember the Atlas was used as a booster to put the first astronauts into earth orbit) and using it for his version of a heat exchanger. The Revell kit was released in the mid-60s, Mike bought it new, did I say that Mike has been in the hobby for a while? Anyway, if one were interested in creating their own heat exchanger, different diameters of PVC pipe are an alternative with bits & bobs added for effect. So, on to the article. Again, let the pages speak for themselves, zoom in to enlarge the page and read on.}

RAILROAD MODEL CRAFTSMAN® PERSPECTIVE

Transporting a heat exchanger

In the commercial world of natural gases, there are large devices that convert air and gas into various liquid gases through a process of super cooling. The largest manufacturer of these industrial components is Air Products and Chemicals, Inc. Headquartered in Allentown, Pennsylvania, Air Products is an international supplier of industrial gases, chemicals, equipment and technology services. The company's Wilkes-Barre, Pennsylvania, facility has manufactured cryogenic equipment for air separation and liquefied natural gas (LNG) and other element gas processes since 1955. Among the industrial products Air Products turns out are heat exchangers, cold boxes, tanks and vaporizers. The company makes over 200 units a year, and Air Products equipment produces over 85 percent of the world's LNG, not to mention oxygen, hydrogen, helium, argon, nitrogen and other rare gases.

Upon completion, the equipment is shipped to customers by various methods of transportation; it depends on the product. For example, special trains are used for large units that do not fit on trucks or roadways. In a typical year, Air Products ships at least two or three of its mammoth heat exchangers via rail. Heat exchangers are huge. They look like a rocket and measure more than half the length of a football field. They are packed with miles of intricate aluminum and stainless steel tubing and valves engineered into super-efficient refrigeration circuits. When they are upright, a 300-ton distillation column reaches the height of a ten-story tower. As air or natural gas is piped into its temperature will plunge to minus 260 degrees to convert it into a liquid comprising various gases. With dimensions that can reach 180 feet with a 15 foot diameter, these long vessels are true high and wide loads. They are shipped on their sides and to hold them in place customised jigs and holding fixtures must be installed on the flat car deck. Since units can cost around 20 million dollars, extra safety rigging is added to ensure limited movement of the load in case of sudden jerks and to keep it from becoming unbalanced during the trip.

On a train, they are referred to as excess dimensional loads and numbered with a specific identification. Conrail, for example, used "SPL" (for special) and a number to identify its high-wide movement trains. These special movements operate between other scheduled trains since clearances may be an issue. For handling details, the employee timetables usually have specific instructions and restrictions. Restrictions can include overhead and side clearances, such as station island platforms, track limits, etc. On turns, the extended load will "grow" due to the swinging arc. Regulations are constantly evolving as the company and railroads learn from experience. Car inspectors must keep up with the latest "rules of the road".

These consignments are always an impressive sight to see on the rails. The consist will include one or two diesels, a flat car used as a spacer due to the overhang, the flat car carrying the unit with impact and shifting monitors cabled back to the caboose, another spacer flat car and the Air Products green and white caboose where the company rider monitors the load. Sometimes a video camera aimed at the load will provide evidence of movement.

For modelers, an open load of oversized cargo is certainly eye-catching and it can spice up operations on your railroad. Remember, if you are modeling an excess dimension load, you need to add a few extra details so that the model looks secure on the flat car. You don't need an on-line industry to ship or receive the load, either; you can model it simply as a freight car passing over your railroad en route to its destination.

An oversized load can also be a great conversational subject. In my case, my father-in-law worked at a small steel plant in Wilkes-Barre, Pennsylvania, that provided stainless steel tubes and minor parts used in the heat exchangers. Every time I visit the area I always look in the yard to see what Air Products is making. Sometimes the Air Products wide-vision caboose is sitting on the lead track. The connecting railroad will pick up the special train at Air Products and move it to a yard until it has clearance for the mainline. In 2012, the one hundredth heat exchanger traveled the rails.

For many shipments, a rail destination will be a dock on the East Coast for transfer to a ship. For smaller units, such as cold boxes, they may fit on one flat car but may have a slight overhang. At times, a unit may be fitted to ride as a rail bogie, made up with Buckeye trucks (ex-PRR F-143 type). They will return cabled together.

These giant heat exchangers are shipped worldwide. They have been sent to chemical plants located in countries such as Abu Dhabi, Australia, Brunei, China, Egypt, Malaysia, Nigeria, Oman and Qatar.

MICHAEL COLLINS

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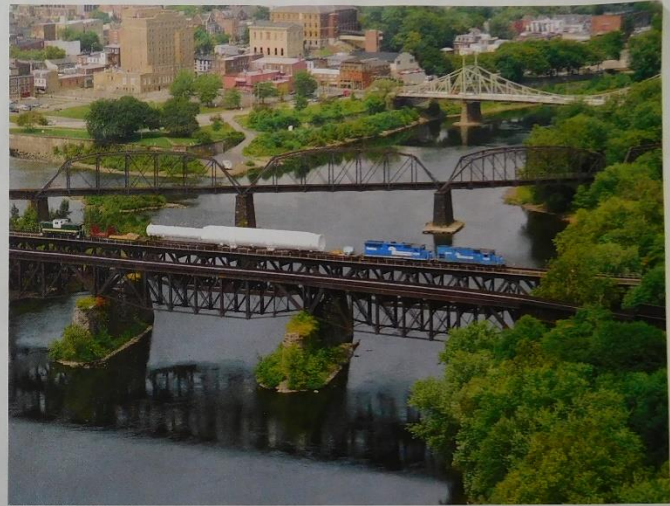


PHOTO BY FARRÉ DANIELE, COURTESY OF AIR PRODUCTS/PHILIPPERAULX/AL 1986



JAM FODDER-HEDDOL, OCT. 8, 2008

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Editors Notebook

commentary/CHRISTOPHER P. D'AMATO



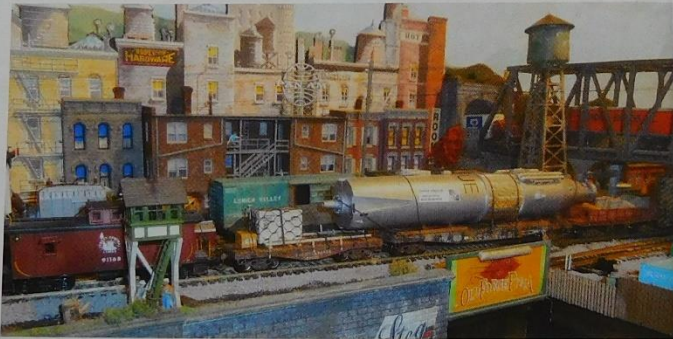
High and wide

You probably don't want a layout full of high and wide loads, but **Michael Collins' PERSPECTIVE** column this month does offer modelers

something to think about when it comes to operating trains on their layouts. An oversize cargo that requires special attention could be just the thing to spice up an otherwise normal operating session.

Mike was so intrigued by this idea that he built his own HO scale model of a heat exchanger. He started with a plastic, 1/4" scale Jupiter C missile kit manufactured by Glencoe Models. His model measures approximately 80 scale feet long and is detailed to look like a heat exchanger he photographed in 1992. He added about ten scale feet of corrugated aluminum around the body, framed by 4" x 4" plastic strips. Two sets of double air tanks (diesel parts), eight vent panels of various types and sizes (a combination of kit pieces and diesel parts) and a 90 degree pipe fitting from Scale Structures Ltd. were also added.

Mike painted his model using Testors' Steel, Silver and Silver Chrome, but notes that some heat exchangers are painted white or in com-



MICHAEL COLLINS

A special train with an excess dimension load has just been inspected and is getting ready to move on the Michael Collins' HO scale layout (above). Note the extra parts carried on the idler flats. The red crane in the background (below) was used to load this heat exchanger on a flat car at the Air Products plant in Wilkes-Barre, Pennsylvania.

MICHAEL COLLINS, WILKES-BARRE, PA, 1992



APRIL 2014



MICHAEL COLLINS, WILKES-BARRE, PA, 1992

APTX 201 (above) was listed in the *Official Railway Equipment Register* (April, 1991) as "Special, Heavy Duty Car Trucks, 12 Axles." They carried the A.A.R. mechanical designation "LS" which was "a car of special construction having two separate interlocking units which form a car body. Units may be separated and load interposed between and locked in place to form a complete transportation unit." These were originally PRR Buckeye trucks. Wide loads aren't limited to traveling on standard gauge railroads as this photo (below) of a special train on the three-foot gauge White Pass & Yukon shows. The shipment was moved from the dock at Skagway, Alaska, to Whitehorse, Yukon Territory. The 13'-4" width loads were carried on flat cars and had to be jacked and slid from one side of the car to the other to clear rock cuts along the line. The railroad made a template on a track push car to gauge the clearance and chipped away the smaller outcroppings to save damage to the loads. A U.S. section crew did the work on the Alaska side of the border, while a Canadian section crew handled the chores north of the border. The train is in a siding to allow the scheduled northbound mixed train to pass. Later shipments were placed upright in the car center and securely bolted and braced with channel iron. They were probably the highest loads ever moved over the WP&Y.

pany colors. Since his load is bound for export to Egypt, he added a fictitious company decal, "UE," along with "Do Not Hump" placards.

To handle the oversized load on his railroad, Mike chose a 50-foot flat car and fashioned a pair of support brackets to hold the heat exchanger in place. These were made from a transformer transporting fixture that he had on hand. He simply cut it in half and placed one piece on the deck near each end of the car and then placed the heat exchanger on the brackets. Similar holding racks could easily be built using styrene strips.

For holding the unit in place, charting tape (matte) was used as strapping. Then, using wood blocks to protect the unit's surface, he attached chains and cables to prevent shifting. A monitoring unit (made from a diesel cab air conditioner) was installed on the flat car's deck under the nose of the heat

exchanger. When the car is ready to move, a cable can be run from the monitor back to the caboose.

For the spacer flats, Mike used two 30-foot cars. One car carries the heat exchanger's concrete base (former missile fins) with scale 2" x 8"s to hold them in place, as well as an additional metal part (from the author's junk box) meant to be an external fitting that is to be added after the unit is installed. On the other flat car are pipes and tubes placed on 2" x 8"s and held with cable (black rigging thread); a large box secured with (hair) netting, chains, strapping and wood blocks; and a small wooden crate.

After a bit of light weathering, the two spacer cars with their loads were ready to go on either side of the 50-foot flat car carrying the heat exchanger. Once hooked up to a locomotive and caboose, Mike's special train is ready to roll when track time is available and clearances are safe.

CHRIS D'AMATO, SUMMIT LAKE, WHITE PASS, B.C., CANADA, OCT. 20, 1980



RAILROAD MODEL CRAFTSMAN

{Editor's note: The trucks under the flat at the top of the page have been offered on the Class One Model Works flats, hopefully they will offer the trucks as a separate line item. They are very detailed, either Babbit bearing, or Roller bearing.}



Wilkes-Barre Support Vehicle



There is that Bus Again





Heat Exchanger in transit to Australia. {Posted by "The Big Little Railroad Shop" 09/13}

NMRA Calendar Entries

by Michael Collins MMR

{Editor's note: Three photographers from our Sunshine Region were featured in next year's 2025 NMRA calendar. One quarter of the year will have a SSR picture to stand over the month's dates. Mike doesn't believe that has happened in the past, that one region would have so many entries selected. Mike did the research on entries with the following information.}

79 NMRA members submitted over 100 pictures. The Sunshine Region had the most entries, with six members submitting pictures for next years' calendar. Those pictures released and printed are for months January, June and October ... plus Greg Komar's photo of Gail's West Virginia Northern was selected for the cover ... Wow! (Unfortunately, Jim Hopes, Gail and Andy Zimmerman didn't get selected), but there is next year!

And here are the pictures ...



The Bethlehem, the Lehigh Valley Railroad's tug, gradually slows as it approaches the float bridge at the railroad's Bronx Terminal. The delivery is on time as always, and the Terminal's owners, the New York Harbor/LV Railroad, will soon take possession of the goods.

Photography and HO Scale modeling by Michael Collins MMR®, Pembroke Pines, Florida.

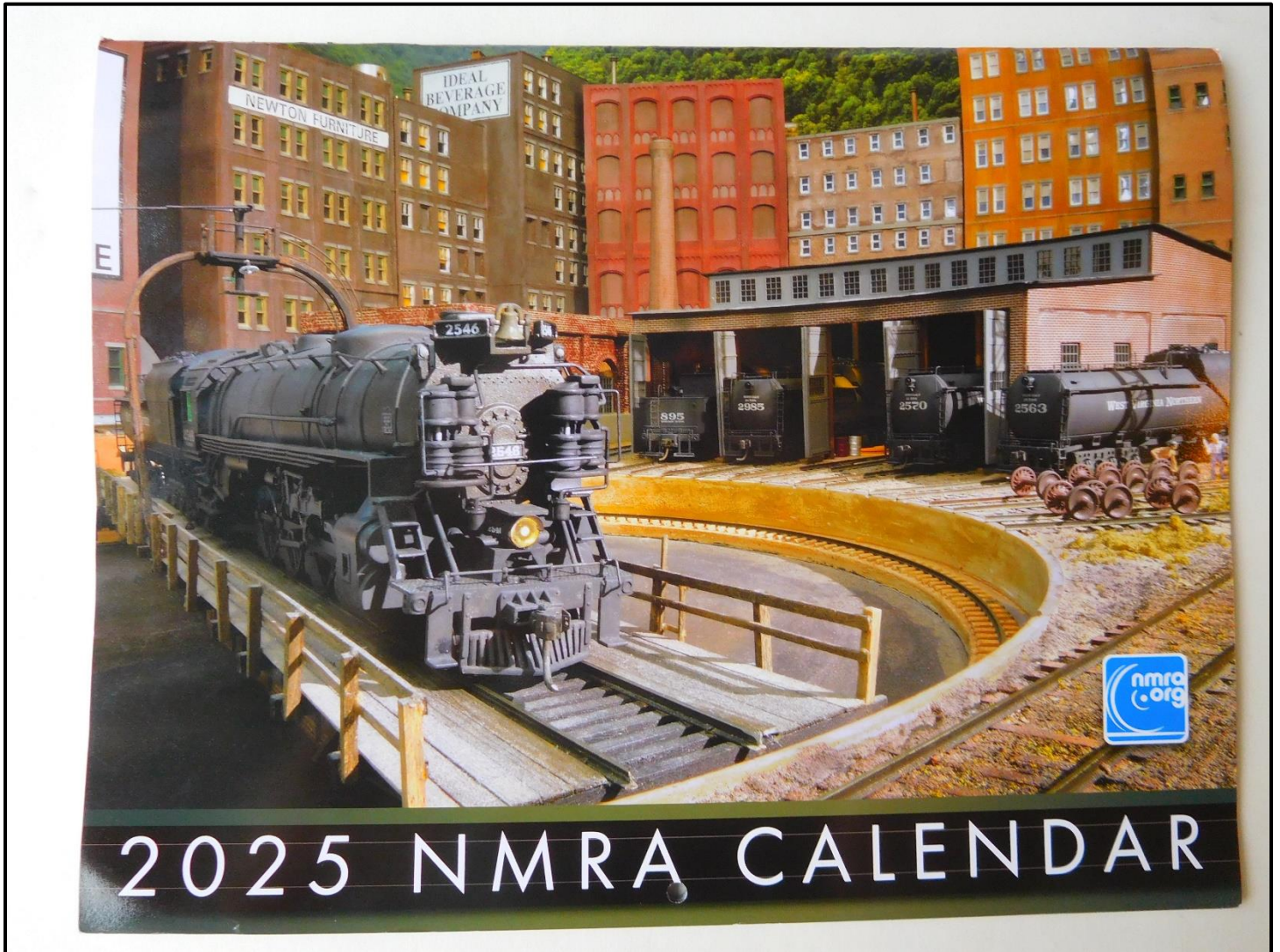
For the month of January, Mike Collins MMR provided the entry of his Lehigh Valley Railroad Car Float



After a long, hard day for the Western Bay Railroad's Flanger Extra #6, the water stop here at Alpine Tunnel is a welcome break. Thankfully the crew is nearing the end of the run. The water tank and pump house were scratchbuilt by Al Sohl.

Photography by Chip Pecere; On30 modeling by Al Sohl, Port Saint Lucie, Florida.

For the month of June, Chip Pecere's entry of Western Bay's Shay # 6 on the railroad of Al Sohl MMR



For the calendar cover shot and the month of October we have Greg Komar's entry of the West Virginia Northern layout of Gail Komar MMR. *{I believe the West Virginia Northern acquired that Mountain on the turntable from the C&O.}*

I thought I would receive some comments about the GG1 that I claimed was the "1st and only" GG1, but no one commented, or they didn't read that far. Anyway, the claim "1st and only" denotes, it was the only GG1 in rivets, all other siblings were welded.

{Editor's Note: I end this year with the names of those we have lost and noted, Robert Gangwish, Lyman Fussell, Keith Williams, and most recently Ray Hazen. Ray was quite prolific with the education he received and passed that knowledge and expertise on to the organization. I have gleaned the following from Ray's wife MaryAnn and what I have discovered from the Paradyne Corp. and the U.S. Patent Office.}

Ramon B. Hazen

May 2, 1938 – December 9, 2024

Ramon B. Hazen was born in Sharon Center, Ohio on the 2nd of May 1938, Ray as we knew him was a graduate of Case School of Engineering in Cleveland, receiving a degree in Electrical Engineering. After graduation, employment at Intel and plus a few years, Ray and his wife MaryAnn moved from the north with their six children to Florida in 1979 and settled on the state's west coast.

Ray was a prolific engineer in the field of microprocessors, circuitry design, signal suppression, and frequency filtering. His work in these areas led him to apply for patents, of which he was granted six during his tenure with the Paradyne Corporation in the late 1990s. His knowledge and expertise was easily displayed as he stood in front of a group at one of our division or region meets and described the electronics of it all. I suppose we could have called him the "Arduino Man" since his clinics were based on the abilities of their use in the hobby.

He truly enjoyed his work; he relayed to his children that he was amazed that he got paid for doing something he was so happy to do. Another thought he passed on to his children was for them to pursue a vocation that they would enjoy focusing on the fulfillment, thereby the job would not be work, but enjoyment. Ray was very open with his knowledge, he was always open to discussing the topics of his clinics whether at the head of a presentation, or in the halls of the venue. He will be missed by all those who ventured in his direction.