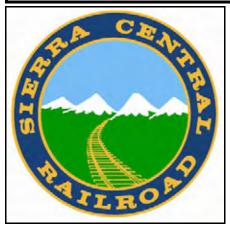
A CHNIRK

Publication of the Sacramento Model RR Historical Society, Inc. Our 59th Year November / December 2007



Inside This Issue

Look for these and other interesting

articles inside this issue of The Herald.

Designing 'Stub' Branchline Yards

Foam Rockworks

A Fond Fairwell!

Uncoupling Techniques

behind us and the trains are now running. Some non destructive construction is still continuing. Let's discuss our activities for the month.

November is here and so is our busiest time of the year. Construction on the railroad is

- 1. The first event will be Railfaire at the Placer County Fair Grounds on November 10th and 11th. Thanks to Don Thamer's Train Station Hobbies we have two tables. I know we have asked the members many times for donations and merchandise to sell, but we need your assistance. The Society will receive 100% of the sale for items you donate and a 10% commission for the items you sell. Scott Inman will manage on Saturday and I will manage on Sunday. We will need volunteers on Friday night, Saturday and Sunday. A sign-up will be on the wall in the club house. Bring your items to the club house as soon as possible. Dick Denison just donated a whole box of items.
- 2. Our annual open house is on November 17th and 18th. We will have lots of new improvements to show the public. Additional signals and intermediate signals have been added. The mockups for many buildings and the Quincy branch are installed. Track and switch installation continues on the narrow gauge. We need your support to get ready for open house. Get you train submission forms to Scott Inman right away. We are accepting the trains that ran in the July Open House and new trains from new members or members that did not have a train in the last open house. You will also need to bring your train or locomotive submission in for a running test. There are sign up sheets on the wall for the various open house positions. Please sign up. If you have any questions please contract Scott Inman.
- 3. We have started the member certification process. It still is a work in progress but we are moving forward. Thanks go to Joe Melhorn for taking the lead on the process. To start with we are certifying in four areas: radio communication, warrants, signals and locations on the railroad. Please contact Joe or any other board member to be certified.



Be aware the Society Christmas party is right around the corner. Rumor has it that it will be at the church across the street from the Club house and it will be on Friday, December 7th. Stay tuned. November should be a lot of fun for all of us, so please participate. There are even rumors that an article on our open house may be in the Sacramento Bee and Thomas the Tank Engine may get sound.



Articles Under Development

The End Game DCC Tips and Tricks

This is a current list of articles being prepared for the Sierra Central Herald. If you have an idea for an article, please feel free to pull me aside and ask for help!



Annual Club Pot Luck Holiday Party is scheduled for:

Keep an eye on our web site,

Bring Your Family and a Dish of Food! *******

Original Idea by Mark and Angela Fry (Australia)

In the effort to create realistic looking rockwork modelers have traditionally used plaster of paris, a commonly available material. However, it does suffer from a number of limitations. You're probably familiar with the problems-sets too fast to carve features into it, develops unwanted cracks when it finishes hardening or if the benchwork and supporting framework isn't really stiff and it is heavy when applied over large areas in sufficient thickness to help reduce the cracking problem. If you have a large area to be covered on a portable module this can be a real problem.



Hydrocal plaster is a bit better because it doesn't need to be applied quite so thick but is difficult to locate and costs more. It dries even harder and therefore is even more difficult to carve detail into it-you end up spending hour upon frustrating hour carving and it is even more brittle than ordinary plaster.



Modelers often use rubber latex (or plastic) molds filled with plaster to reduce the carving time and reduce the amount of artistic ability needed to make good looking rock formations. A good improvement but can also be a bit pricey unless you share your molds with others or are constructing very large areas to justify your investment.

Sculptamold is another material commonly used that is lighter and doesn't crack as readily but is also a bit pricey unless purchased in fairly large quantities and really isn't readily available at your local hobby store.



One of the newer techniques developed during the past ten years is what is called "Foam Rock". Esentially, the foam is created using two chemicals which when mixed together rapidly expands because of the creation of gas bubbles that are encapsulated by the resin as they develop. This will then setup either as rigid or spongy depending on the chemicals used. This is different than the 'pink' or 'blue' foam board that is commonly used on layouts that you can carve using a 'hot knife'. The rigid foam is a brownish yellow color commonly used is in reuseable packaging and the spongy stuff is usually white or gray and comes in several densities normally used in vehicle seat cushions. Scraps are usually available free at car upholstery shops or buy at craft stores.

> The second major component you'll need is Joint Seam Compound. Readily available at 'Home Depot' it comes in several sized tubs ready to use. Its purpose for us is as a top coat and base for the stains, textured paint, ground foam and dirt.

> These then are the materials you need to create very lightweight realistic looking inexpensive rockworks.

And now, here is how it all comes together:

- 1. The foam is cut in sections by a small saw, knife, scissors or torn by your fingers into the basic shapes you want. Separate pieces are then attached together with 'liquid nails'.
- 2. The Joint Compound is mixed with some water to get a pancake batter consistency which is then applied as a topcoat to the foam form using a paint brush. This

Foam Rockwork continued by Karl Griffin

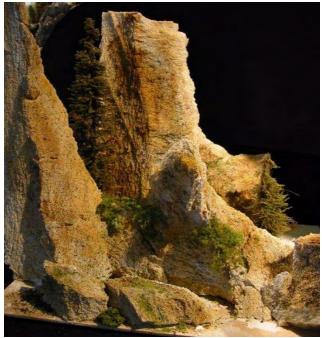
acts as a primer coat for the next step.

- 3. Apply earth tones Medium Textured Paint to the now dry Joint Compound top coat. This completely seals and disguises the base foam support material.
- 4. Apply stains, washes, chalk powder and colored dirt while the textured paint is still wet.
- 5. Using Mat Medium acrylic scenic cement, attach ground foam, rip rack rock and shrubs/trees to complete the scene.

And that's it! Beautiful, lightweight rockwork... On your various trips across the country collect colored dirt/powdered rock. Clean it, dry it and sort according to size in containers. Study photos of rock formations and coloring-remembering a rock formation often looks vastly different at different times of day.









A few more helpful hints to improve your technique:

Stipple brush the joint compound into all the cracks and crevices. Do the same with the textured paint. Use of a cutoff paintbrush or basting brush will help you here. If textured paint isn't available you can add a bit of the joint compound to the latex paint to thicken it up which permits more surface depth. All of these products are water soluable.

Note on the picture on the left: Foam board is used to raise the base of the rockwork. Joint compound is then used to fill the gaps.



Designing A 'Stub' Branch Line Yard by Karl Griffin



If you are one of those 'purists' that firmly believes that your railroad should start in one place and end in another place and not just go around a loop then what you have is a 'Point to Point' style of layout. The larger the size of your layout room and or the smaller the scale of your trains are, the more practical this type of arrangement becomes.

The amount of space you do have should always be used as efficiently as possible. Nice rule that is...but putting it into practice is where the challenge is! Rail yards by their nature have a tendency to use up a lot of your available real estate so if you decide that you really must have one or two plus interchange areas, then these areas must be designed with what I like to call 'elegance' meaning to make it as user friendly as possible, eminently workable and simple.

Elegance literally means a beautiful solution. Computer programmers use this term to describe a group of code that completes the assigned task in a compressed format that doesn't use up a lot of valuable memory. We would translate that as economy of space. If you examine various trackplans that others have thought up (and you should do this) you may come away thinking that this plan would not work well for you. This is often the case because if your mentally 'play test' the plan you notice that it has too many switches that aren't used often enough to justify their existance, it has tracks that aren't used enough or are curved in the wrong places which makes coupling impractical. Or it requires too many switching moves which requires too much time for your yard master to makeup and breakup trains. Or even worse, it just takes up too much space. When designing a small yard, ask yourself what are the real operating requirements, what is the area size and shape of the space available and how do I make it easy to operate and maintain. Answer these questions first and then start drawing.

User Friendly-if you have manual throw turnouts you don't want to have to reach out any further than necessary otherwise you're are going to be derailing cars in the front of the layout. If you have a control panel on the front edge of the layout you will have even less space to reach out to uncouple cars for example. Therefore, keep the shelf depth shallow, have the trackage used the most right up front, keep the switch count down to an absolute minimum (this keeps derailments down) and make it a 'logical' arrangement of tracks so that your operator can readily visualize the sequence necessary to

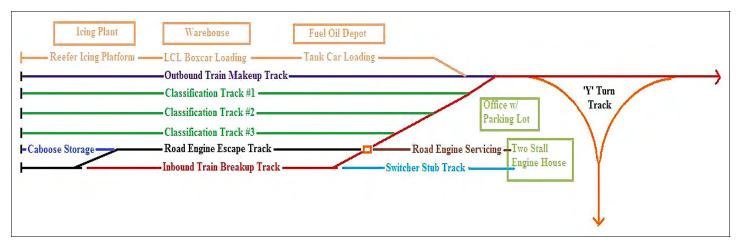
breakdown an incoming train and set up the next out going train.

Simple-means uncomplicated. Some layout yards look like they designed to intimidate or impress rather than to function well. A twenty stall roundhouse plus 10 outside tracks-who are we kidding here? Unless your mainline is a 1000' run you are setting yourself up for a maintenance nightmare. A 20 track classification track arrangement? You are using this for storage rather than classification-aren't you? It will be either so deep that you can't reach most of it or so long that it takes up most of the layout room that should be used for a reasonable mainline run. If you design it shallow then you can reach everything, uncoupling and switch throws can all be manual and the operator feels much more involved rather than trying to remote control everything. Expense, high maintenance and construction difficulties are downers to real enjoyment of your operations (and scenery) which is where your emphasis should be. It usually takes the construction of a few layouts to begin to understand this!

Enough of the lecture-look at the sample branchline yard above. Every attempt was made to make it simple from a construction standpoint, shallow enough so you can reach every switch for ground throws and uncoupling as well as being as compact as possible. This can be constructed in a depth of less than two feet in HO scale. Seven #6 standard switches and one #6 doubleslip switch. The doubleslip could be replaced with a standard crossing but that would necessitate more moves for the road engine. The length of your incoming trains determines the overall size of the yard. I have only three classification tracks because an outbound train won't have more than three possible destinations, now would it? Designed for a diesel locomotive, a turn around option isn't needed.

Operation: The inbound train comes in on the red track and stops short of the engine run around track. The road engine uncouples and escapes to the servicing track. The local switcher breaks down the train, caboose first, and divides as necessary according to next destination on the classification tracks and returns

The Branchline Yard continued by Karl Griffin



to its ready track when completed. The road engine returns and hooks up to the outbound train on the ready track.

Nothing complicated about this operation. And that is the whole point of this mental exercise. Everything is straight forward, logical, simple, user friendly...elegant. Your yardmaster can rapidly 'turn' a train. In his 'free time' he can use a 'fiddle yard' if desired to change the consist for future trains while he waits for the next incoming train or he can 'block' cars in the classification tracks. Because all the trackwork is right in front of him, reading car numbers is easy for sorting and the changing of waybills is also easy because installing the holder on the far left or far right side would be out of the way of his movements.

Now then, let's take a look at example #2. This is the same arrangement but with one added track to allow the yardmaster to generate freight cars from three lineside industries right at his location to occupy his time whenever an outbound train has left. The shelf is deepened by 6" which is still within easy reach and all uncoupling of the reefer, box and tanker cars is done in front of the buildings. In addition, a wye turning track is provided which allows you to operate steam locomotives as well as the option of having your yard serve two possible branchlines! Or this could lead to a penninsula area accessable from both sides. This could be an industrial area, port area or several other interesting possibilities. Anytime you can have trackwork servicing multiple options you are onto a good idea. I also added an engine house and office area to fill in otherwise empty space.

'Play Testing' - I love this term...after designing a possible trackplan or section of one, mentally imagine your trains operating this area. Do the switching moves, classifications, breakups and all other operations that you will use this area for to see if you have 'good flow' or do you have bottlenecks, unintended traps or altogether unworkable sections that need redesign. Any curves too tight / not enough space planned for ladder tracks, etc? Do a thorough job of this and when you really think you have satisfied all your requirements, show it to

some of your friends especially those who have had experience in layout design and construction. Much better to find out now that something doesn't fit or that you forgot to include something necessary than to have a crisis in the middle of construction or worst of all finding out in actual operations that you left out something crucial!

There may well come a time when you have an ususal challenge to overcome in your design. Things such as the necessity of constructing a curved yard because that is only place available or a ceiling support beam or some other obstruction that can't be moved or requires a liftout section right in the middle of your plan. You won't be the first modeler to experience these problems.

Elegant, user friendly, simple. Design your track layout with these considerations in mind and you'll keep the frustration level down to a minimum.





Model Railroad Supplies

Phone Orders Gladly Accepted

(916)485-5288

2752 Marconi Avenue Sacramento, CA 95821

www.brucestrainshop.com

Uncoupling Techniques - Article and Photos by Karl Griffin

With the invention of the Kadee delayed action coupler, model railroaders finally had a pretty realistic looking coupler to replace the then model industry standard XF2 type coupler. It featured all metal construction for strength (except for the coupler pocket), springs to permit opening of the coupler face and movement of the coupler shank and came in various lengths and heights to fit most manufacture's models-especially locomotives. Its other most notable feature was its 'delayed action' ability which allowed you to shove a freight car to an industrial siding, reverse direction and leave the desired car behind if you first positioned it over a magnet situated between the rails at some convienent point.

The 'purists' thought this last feature to be a little unprototypical since railroads use a brakeman to 'pull the cut lever' located on either side of the car when there is slack between two cars which raises the uncoupling pin and permits the cars to separate when the locomotive reverses direction. The airhose is designed to separate under tension as the cars separate. The magnet between the rails also didn't look like it should be there either and would often cause unwanted uncouplings when a train would run over it if slack should develop between cars due to either a momentary loss of pulling from the locomotive (dirty track) or a change of grade on the mainline or siding.

So the purists came up with 4 alternative methods of intentionally uncoupling their cars. These folks are generally of the opinion that 'hands on' is better than remote control which is why they also prefer manual ground throws for their turnouts, waybills and point to point layout designs rather than continuous mainline running.

The first method involves physically lifting and separating the two cars a quarter of an inch. It costs nothing but requires a steady hand so as to place the wheels back on the track correctly.

The second method involves the use of a 3/32" blade diameter jewelers screwdriver. (see first photo) The screwdriver is inserted between the the two couplers and gently twisted clockwise to force the coupler faces apart. Every modeler has one of these in their tool box which makes it convenient and readily available.

The third method (my invention) involves the use of a standard inch and a half long paperclip. One end is straightened out and a 180 degree loop is formed at the end. (See photo #2) This hook is used to pull the 'air hose' that loops down from the coupler and gently pull



Photo #1



Photo #2



Photo #3

Uncoupling Techniques continued...

towards you while insuring that there is slack between the couplers. This will reliably uncouple the two cars.

The fourth method is to use the 'Rix Products' uncoupling magnet. This nifty tool consists of a pair of magnets spaced about 3/4" apart in a plastic hoop open on one end which permits you to slide it down between the two cars. The magnetic attraction pulls both 'air hoses' apart (unlike the paper clip which pulls only one) and separates the two cars. I added a several inch long wooden extension to the handle to make it easier to get down between taller (high cube) type cars. (see photo #3)

All four of these methods will reliably get your cars uncoupled when and where you want them to. They only have two disadvantages. They require a fairly steady hand and they will work only as far as you can confortably reach.

There is a sixth method: The Kadee electromagnet. It works on the same principle as the Kadee permanent magnet except that you can turn it on and off as desired. This solution is great for those out of the way places that are difficult to reach but its disadvantages are that it is expensive for numerous locations, it must be 'built in' during construction and it is difficult to operate it and your throttle at the same time. If left on too long by accident it will burn out and have to be replaced.

Six different ways to uncouple your cars-which is best? Each method has its advantages and disadvantages. I'd recommend you try all these techniques and see which methods work best for you and your guests on your layout. If one of the portable methods is to your liking, then you can use it anytime on anyone's layout.

One of principles of good layout design should permit you ready access to uncouple your cars. This means that the most common spots where you'll be doing a lot of uncoupling should be towards the foreground of your layout. A second principle should be that the uncoupling should be done in front of a building instead of at the rear. The higher your layout is constructed the more important this becomes. If possible, on your freight yards have your incoming trains enter a track close to the front edge to facilitate the breakdown operation.

And finally, experiment! There is no one best solution just as there is no one best layout. If you can come up with a better mousetrap, your fellow modelers will thank you...



*** A Fond Farewell! ***

For more than 10 years I have been your newsletter author and publisher. It has been both a pleasure and an honor to have had the responsibility to be a voice for the Sacramento Model Railroad Historical Society, Inc. during this time representing our fine club to the world via the internet.

I was 'offered' this additional duty when Dave Good started to get burned out by the never ending deadline to go to press. So I taught myself how to use Microsoft Publisher, Photo Plus, a scanner, digital camera and their attendant software programs. As the new publisher I decided to redesign everything in the newsletter from the look, feel and overall appearance to the style of the articles and do it all in color which turned out to be a major personal expense. Fortunately with the transition to publish on the internet that expense went away.

When you author three or four major original articles in each issue of a newsletter, you end up doing a lot of research. While each of us probably likes to think we know a fair amount about various subjects in this wonderful hobby of ours, it turns out that most of us are good at generalities but when it gets down to specifics it is a lot tougher and original subjects that haven't already come up in various magazines are really few and far between.

With that challenge in mind I tended to talk about track design quite a bit. The primary reasons for this were that the design is so important to smooth and practical operations. If your track design doesn't do everything you want it do or operations are awkward or unrealistic you're going to tear up that layout and start over again and incorporate the 'lessons learned' into your next creation. My thinking was that if I could get my readers to design it right the first time then I would be preventing a lot of needless frustration. I hope that my efforts were successfull or at least that the ideas presented made you think a little more about the various possibilities.

In the later years I tried to tell more of the incredible history that surrounds this unique place-Sacramento, the terminus of the 1st transcontinental railroad and home to the 1st railroad west of the Mississippi River.

I hope the next publisher and author of this newsletter continues on in the best traditions of the club-helping others to get the most out of this, the most wonderful of hobbies! I fully expect to send in a 'guest' article from time to time as inspiration strikes...



Articles for inclusion in the Jan / Feb issue are due NLT the second Friday of December!

The Sacramento Model Railroad Historical Society, Inc. is located at 1990 Grand Ave., Sacramento, CA 95838 and is open every Tuesday and Friday night at 7:30 p.m. It is the home of the Sierra Central Railroad which is modeled in both HO Standard and Narrow Gauge. Telephone (916) 927-3618 for info and directions. Visitors are always welcome!

Our Internet Club Website: www.smrhs.com

Our 2007/2008 Officers:

President Bob Rohwer
Vice Pres Scott Inman
Secretary Dave Good
Treasurer Don Butler

Board Members Joseph Melhorn 3 yrs

Dave Megeath 2 yrs D Launderville 1 yr

Newsletter Editor/Publisher/Author Karl Griffin E-Mail karl.deegriffin@comcast.net

Next General Meeting is the last Friday of November, 2007

© 2007 SMRHS Publications

Sacramento Model Railroad Historical Society, Inc. 1990 Grand Ave.

Sacramento, CA 95838