

# SHORT LINE

Sierra Division \* Pacific Coast Region \* National Model Railroad Association



The World's Greatest Hobby!

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## Using the Internet to Get the Short Line

The Sierra Division would like to see as many people as possible switch to the **Digital Short Line** which is available for easy download if you have some type of internet connection other than dial-up. Files are usually about 4 MB. Before I got a higher speed connection, I took my laptop to a Wi-Fi hot spot and downloaded.

The division's major expense is the production and mailing of

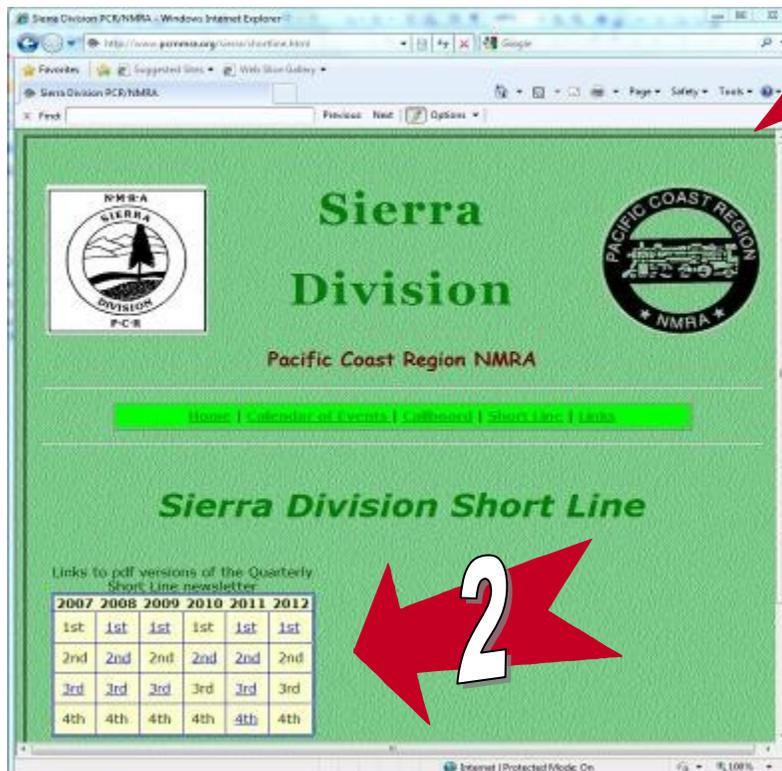
the **Short Line**. As more people switch, savings can be used in other ways to benefit members.

There are other advantages to switching. You get the issue earlier, it is in full color and instead of ten pages of content there are usually over twenty.

Just send a request to: [gerber1926@gmail.com](mailto:gerber1926@gmail.com)

Be sure to put **editor** in the subject line.

Follow this link for the expanded digital color issue of the **Short Line**: <http://www.pcrnmra.org/sierra/shortline.html>



1. Click on or type this link.
2. Click on the issue you want.



## Sierra Division Callboard

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bership problems,

### **SHORT LINE**

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LINE**, 6601 Ray Family  
Lane, Magalia, CA 95954 or by  
email to [gerber1926@gmail.com](mailto:gerber1926@gmail.com).

If e-mailing put EDITOR in the  
subject line.

## From the Superintendent

I want to thank everyone that came to the last Division Meet at the Sacramento Model Railroad Historical Society. We had a good time with a clinic about installing LEDs for lighting in car, locomotives etc. We also had a chance to operate on their layout.

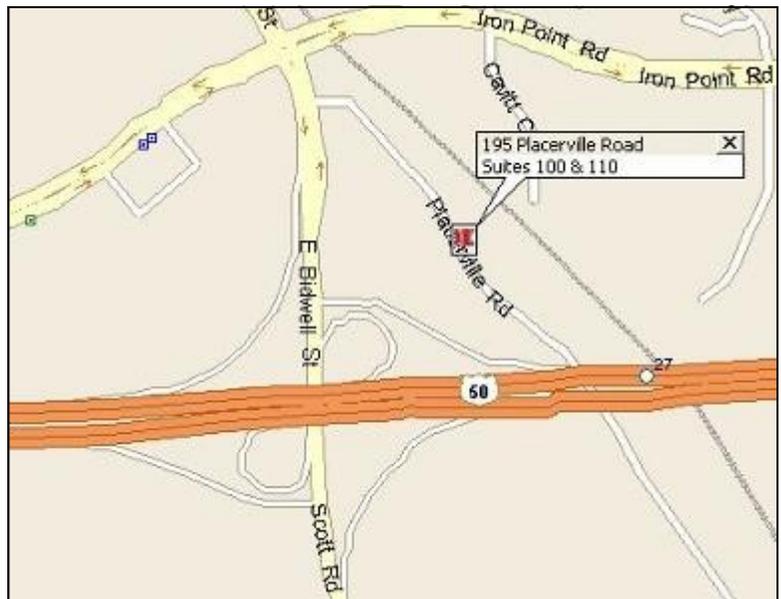
On May 12 we will have our spring meet in Folsom. The Sacramento Modular Railroaders are setting up their layout and running it for the public to see. It will be in a storefront that isn't occupied right now. This is across the street from the Hampton Inn on Placerville Rd., Folsom. There is going to be lots of activities there. The speeder group is going to be running their speeders on the abandon Placerville SP Branch. The Sacramento Modular Railroaders will be running trains for the public to see and will have a couple of modules set for us to do some switching on. We will have a clinic "35 Years on the Sacramento Central" by Dick Witzens. We will start the meeting at 1PM but the club will be setup all day. So come early and see what is there. This should be a good day. The address where the club will setup is 195 Placerville Rd. suite 100 & 110 in Folsom.

Don't forget this is the day we pick up the Northeastern Scale Models kits.

*Please, we need some help is a few areas.* We need people to serve on the International Railfair. We need some volunteers to help set up these division meets. The summer Sierra Division Meet will we will have nominations for Superintendent, Chief Clerk and Paymaster with the voting taking place at the Fall Division Meet. As I have said before, I will not running for reelection as I have some

health issues. We absolutely have to have some people step up and help with running the Division.

Jim Long  
Superintendent



# From the Editor

## Letters to the Editor

Hi Gary,

I was looking at the Short Line recently (the on line version), and was intrigued at the pictures of the picnic in Grass Valley. Intrigued because you apparently lost my name. On page 11, I am the person standing next to Bob Warner talking to Leah Charonnat. Yes, that's me, Jim Dieckman. I am also the person sitting across from Mary and Gus on page 14. Just thought you'd want to know.

Thanks, Jim Dieckman

P.S. I'm assuming that you are the one who captioned the pictures.

**Jim, thanks for the input. I take most of the pictures but unfortunately do not know most of the members and have a terrible memory for names. I did ask for help in identifying those in Grass Valley and printed those identified. I would like to find someone willing to regularly check future photos and help with names.**

### CONTENT WANTED

Editor wishes to add "HOW TO" more modeling content, **PROTOTYPE INFORMATION**, or **INDIVIDUAL LAYOUT ARTICLES** to the newsletter. If you have an idea or know of a website with a great idea, please **PASS IT ALONG IMMEDIATELY!**

[gerber1926@gmail.com](mailto:gerber1926@gmail.com)

Many thanks to **Robert Schott, Ed Pultz, Bob DeWitt, Jeff Lemke and Mike McReynolds** for taking the time to share their excellent articles in this issue. **I always welcome photos** (as long as you are the photographer) along with a caption. They can be model or prototype. **Dave Mussatti and Mike McReynolds** were kind enough to get this started and they appear in the expanded **Digital Short Line**.

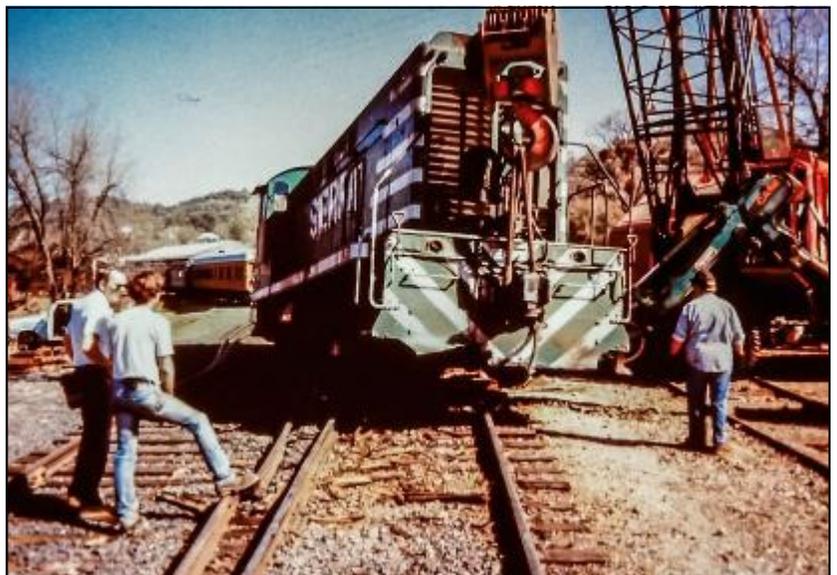
## *On the Ground*

*by Mike McReynolds*

The radio comes to life, "Yard we're all over the ground out here!" Everyone within earshot of that call is filled with a sense of urgency as the adrenaline starts to flow. An artery has been cut and the railroad is hemorrhaging time and money until it has been repaired.

On a short line railroad this call galvanizes every soul on the property, from yard clerks to the superintendent. First, the severity of the derailment is determined. If the cars are empty and close to the rail, it may just be a matter of pulling them on using rairlers and hardwood blocks. A serious derailment involving heavy loads or the locomotive is another matter. Shop forces grab tools and head out to check damage to traction motors and brake rigging. A call is placed to the local crane company for the big hook. The section gang loads ties and the rail trailer, and heads for the wreck.

Often while waiting for the crane, the damaged rails are cut and removed. This is a dangerous job; great care is taken when cutting the rails as the pent up energy in twisted and bent rail can be released violently when cut loose, potentially causing injuries or even fatalities. Everyone stays clear while this operation takes place.

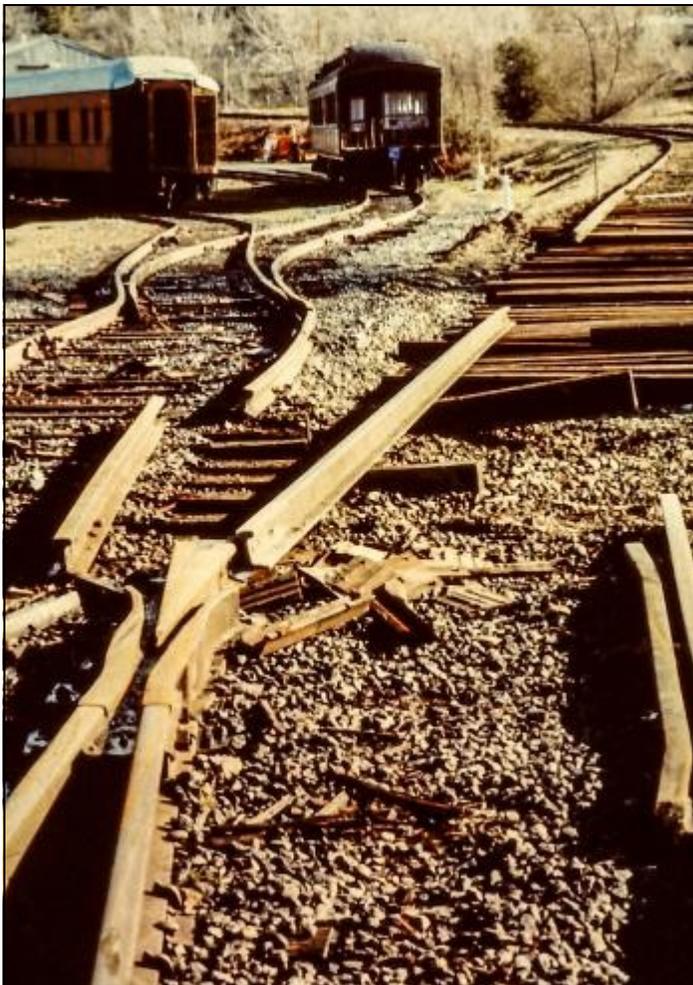


Getting a lift from the big hook on the Sierra RR.

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## On the Ground FROM PAGE 4

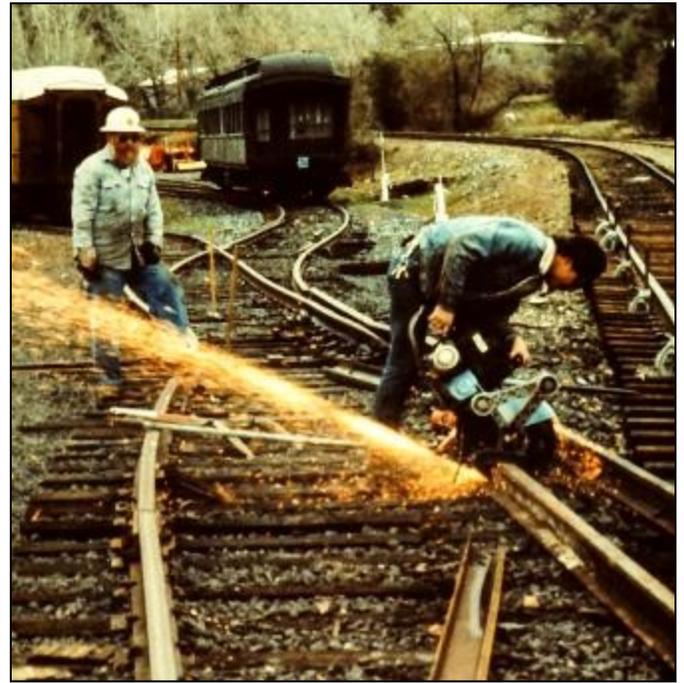
Once the crane arrives the wayward equipment is carefully set back onto good rail or set aside until tracks can be rebuilt next to it, then the hard work of restoring the railroad begins. Ballast is cleared away and damaged ties are replaced. New rails are put into place, tie plates are set up and we start spiking the rails down. The only break in this process (which often lasted well into the early morning hours) was when a supervisor would go get a couple bags of hamburgers and sodas for everyone. Prior to the arrival of the cell phone, many of us didn't even get a chance to call home. Fortunately, most wives knew if



**Steel spaghetti!**

we didn't show up after work there was trouble on the line.

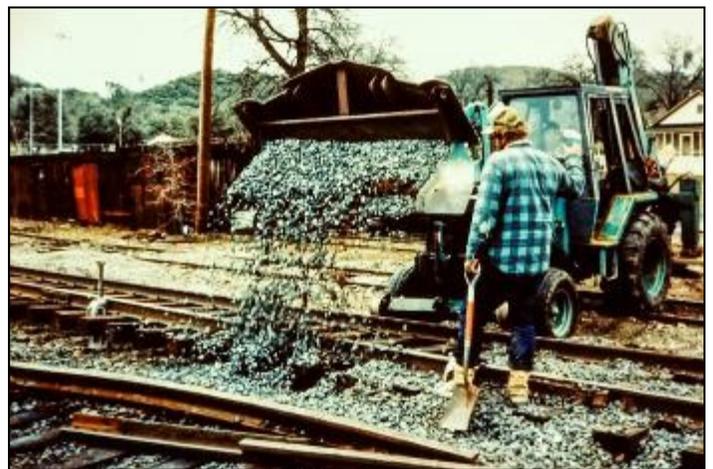
While all of this is going on, the derailed equipment is inspected for damage. Drawbars can be bent or bro-



**Whittle and fit.**

ken, as well as ladders and cut levers. Wheels are checked for gouges on the flanges and bearing are realigned if necessary. If there is damage to any of these, the car will be set out at the first siding until the mainline railroad car department can repair them and release them for service.

After the rails are realigned and the ties are tamped up, we watch as the train is carefully rolled across the repaired area. The section gang will be back to dress the walkways in the morning and pick up any loose debris. We all drag ourselves home for a couple hours of sleep before returning for our next shift, hoping



**Finishing touches.**

(This is Mike's second article for the [Short Line](#).)

# Prototypical Operations on the Sierra Central

By Robert Schott

As part of the **Sierra Division NMRA Meet** held on February 4, 2012, the **Sacramento Model Railroad Historical Society** hosted a prototypical operating session on their HO standard gauge layout. NMRA members were

invited to join the operations. To familiarize the new operators to the layout and procedures, pilots were assigned from the Society membership.

The Society's HO layout is a multi-deck design with a 12-track classification yard representing Sacramento's 12th Street Yard on the single deck. From Sacramento, the Southern Pacific is modeled on the lower deck and runs to the west through Davis, Martinez, West Oakland and the Oakland Pier. On the upper deck moving east, the Western Pacific is modeled through Oroville, the Feather River Canyon, and on to Keddie. Also modeled on the upper deck are Marysville and Quincy.

The "Proto Ops" sessions on the Society's **Sierra Central Railroad** accommodate passenger trains but focus primarily on moving freight. A conventional car card and 4-position waybill system is used to forward freight cars. Train movements use a combination of "blue train cards" crew orders and track warrants issued by the dispatcher for authority over the mainline.

Although 4-position waybills are common, there are a few differences found on those used on the Sierra Central. Technically, waybills are only for loaded cars and empty car orders are for the rest. For simplicity, a single 4-position card contains both. To expedite processing of the waybills, each location has a unique color code. For industries located along the modeled portion

on the layout, the waybill has an additional yellow



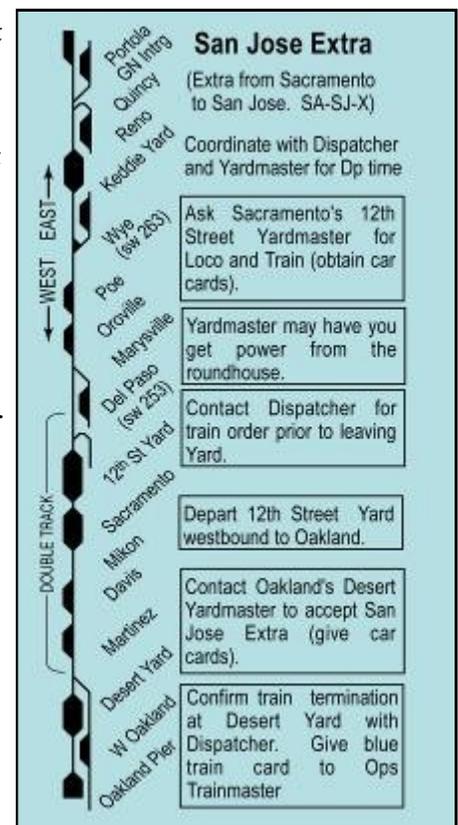
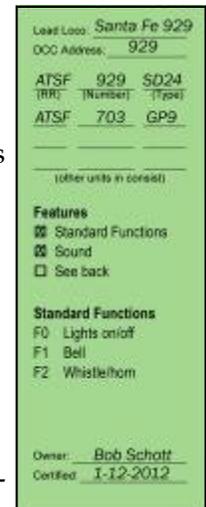
band above the colored bar for the location.

Since all freight car classification is done at Sacramento's 12th Street Yard, all cars must be directed to this location. To ensure that this is done, one position has a double yellow bar with "to Sacramento 12th Street Yard for Classification". These double yellow waybills are turned by the 12th Street Yard crew when the cars arrive during a session. All other waybills are turned between sessions.

Although complex, members NMRA members were able to manage the cards and run a variety of trains with the help of their Society pilots. In fact, the proto ops session began early when several attendees who declined to attend the LED clinic were recruited as train crews. These crews ran the first through trains from the staging yards at Oakland's Desert Yard and Keddie. After lunch, additional crews ran passenger trains, locals and more trains from 12th Street Yard. Not everyone was a road crew as some were able to classify cars at 12th Street Yard.

All in all it was a very good experience for both the SMRHS and NMRA Sierra Division members.

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## Sierra Division Members Help UCD Pediatric Clinic

By Ed Pultz

In March 2011, the **University of California at Davis (UCD) Pediatric Clinic** contacted **Sacramento Modular Railroaders** through their website requesting help to repair and maintain their display layout. This is a G scale oval of track suspended from the ceiling with a short **Thomas the Tank Train** running during office hours for the enjoyment of the children waiting to see the doctor. The train no longer ran.

**Bob DeWitt**, a longtime SMR member with large scale experience, **Dick Kreutzer** and **Bob Warner** SMR and **Sierra Division** members, volunteered to visit the clinic



and evaluate the layout and equipment. They found worn out track (the rail-head on the outside rail of curves was worn down to the rail web), a marginal power pack, worn out locomotive and

cars, and inadequate wiring and feeder wires. **SMR** donated \$500 to start the repairs and received an additional \$500 from **Sierra Division**. New track was bought along with an adequate power pack and a couple of new G scale train sets. The idea was to rotate train sets every few weeks. While one ran the other would be lubricated and have the wheels cleaned. Each time a set was changed the track would be cleaned also. (At the October 11, 2011 **Sierra Division** meeting a request had been made for further support for the G scale layout at the **UCD Pediatric Clinic**. The request was for \$1000 for equipment and for ongoing maintenance. The request was approved by members.—ed)

On a Saturday morning in April 2011 **Bob DeWitt**, **Dick Kreutzer**, **Bob Warner**, **Dick Witzens** and **Ed Pultz** met at the clinic to replace the track and wiring. It was after this the operational learning curve started.

## Problem Solving at UCD

By Bob DeWitt

My objective will be to fill in some of the details of the learning curve that Ed mentioned in his last paragraph.

As Ed also mentioned, I have a lot of knowledge and experience with large scale, but I've never had any experience with a layout that had to operate on average 7 hours a day, 5 days a week. In other words this was also a learning curve for me.

Some of the decisions the committee first made, Ed has mentioned above. To get things running I donated an old Lionel Thomas set that we stuck on the layout; it ran just fine. With the fine running in mind, we decided to try out some new **Thomas the Tank Engine** Series trains on this special children's layout. Bachmann is the only company making the sets at this time so we purchased a Thomas set, a Percy set, and a James the Red Engine all at good prices. These Thomas sets all have metal plated wheels on their engines and cars, and we thought they would run just fine on the brass track. They did not.

We ran Percy first and problems quickly developed with things like dirty track, squeaking wheels on the curves, and plating on the engine and car wheels wearing out quickly due to so much running time. We tried James next with the same results. As a result of our first two tries, we did not put Thomas it's self on the layout. To mitigate these problems we tried a good number of fixes. The first was to mount a **Masonite** slider below one of the cars in each set. We also installed ball bearings in the car journals. When that did not fix all our problems we purchased some rather expensive plated metal wheels that had ball bearings in both wheels. That should have been enough fixes, but those wheels wore right down through the plating in a matter of weeks. That only left us with my old Lionel running and it was getting dirty within a matter of weeks.

I suggested, and the committee concurred that we purchase a standard Center Cab Switcher with Caboose from **Aristo**, and some solid steel car wheel sets, with ball bearings from another source that was about a third more expensive than our worn out plated steel wheels. These would go under the caboose and a couple of cars that I donated to the layout. This set ran pretty good and took care of most of the problems we were having, however we were still going down to clean the layout oftener than we would have liked. We did have a problem with the engine as the plating on its wheels soon wore down in many spots. We knew underneath the plating was a solid steel wheel, so we took off the rest of the plating and are still running it on its steel wheels.

I'm sure you are probably wondering what happened to the **Bachman** Thomas Sets and all those ball bearing wheels we purchased for the layout! We sold the new Thomas Set for almost its full price to a new member of **SMR**. We sold the used James at **Railfair** and the ball

bearing car wheels for what we could get for them. We kept Percy and all its cars and have now put a 2 axle diesel drive, with stainless steel wheel under it. I had a lot of left over plastic **Aristo** car wheels that we tried under Percy's cars and they work just fine. We purchased a 3 axle diesel drive, with stainless steel wheels to be used under the **Lionel Thomas** when its driving wheels wear out. The two **Lionel Thomas** coaches came with plastic wheels and they are running fine. Two more coaches were purchased at **Railfair** so Thomas would look longer for the children. Finally, all the money that has come in from the sale of our first purchases has gone back into the **UCD Children's Layout Fund**. The fund is taken care of by **Ed Pultz**, so as you know it is in good hands.



**Dick Kreutzer, Bob DeWitt, Bob Warner solving a problem.**

Anyway, I did make contact with a friend who is a member of the **SVGRS**, and who has been taking care of two **Kaiser Hospital** layouts. I found out from him that the best way he has found to clean the track is to only rub it down with **WD-40**. We have tried that and found that it is working well for our children's layout. We did decide to keep the **Masonite** sliders and we also soak them up with **WD-40**.

Well that's about it from my view point. The Center Cab Switcher consist has been running for a month and a half now without any problems. In fact It has been so long since we have been called to the layout, that the nurses sent us an email saying they missed see us.

**UCD Pediatric Clinic | Page 13**

## Did You Ever Wonder How Brass Trains Are Made?

*By Jeff Lemke - ©2012 permission granted for use of article and photos from <http://www.twinportsrailhistory.com/>*

Brass railroad models aren't just something that people collect or run on their model train layouts. Brass model trains were born of an industry that started in the cottages of Japan. And when those cottage companies flourished in the late 1950s and early 1960s they farmed out projects to start ups in South Korea. It didn't take long for the Koreans to figure out how to do the same thing better, and less expensively. By 1975 the Korean brass manufacturing market was off and running. To the surprise of many, in just a few years the Korean builders would leave Japan in the dust with the variety of products and enhanced level of detail they included on each of those products. Put simply, the Korean price/value proposition was something that Japan couldn't compete with because their standard of living was so much higher compared to South Korea at that time. The Koreans were hungry to create an industry that would provide jobs and good fortune for their work force.

If you look through the advertising pages of any of the older hobby magazines you'll find a wealth of ads from brass import companies that marketed thousands of differ-

ent brass models going back to about 1975. When these new models from Korea blazed onto the scene it caused quite a stir. They were better detailed and LESS expensive than anything we could get from Japan at that time. I remember working in a hobby shop then. Modelers would call us regularly to see if anything new came in from the likes of PFM, Westside, Hallmark, and Sunset. Back then hobby shops bought a few of everything the importers made purely on speculation they would sell. We couldn't keep the things on the shelf. We actually asked customers if we could keep their models in the show case for a week or two before the next batch arrived so we had something to show other buyers. It really was crazy how fast those models sold. Brass models in a train shop were a huge draw that brought people into the store to marvel at the detail of these miniature reincarnations.

If you haven't figured this out yet, in life and in business, everything has a life cycle. A life cycle includes a beginning, a rise in learning, activity or success, a high point, a

**Brass Trains | Page 8**

## Brass Trains FROM PAGE 7

gradual decline (short or long), and an end. Sometimes that end arrives abruptly. That is the life cycle of every product and every business. Nothing lasts forever because everything has a life cycle. Like a point on a bell curve, the brass model business is clearly well past its production high point, and could be plotted somewhere on the down slope side of the curve. It's nearing the end of the life cycle. How near is anyone's guess. The time remaining in brass models production is impacted by many factors. Increasingly higher standards of living in countries producing these goods will always drive production costs higher. That should come as no surprise.



**The first two workers in this assembly line are using soldering jigs to assemble the sides, back wall, and roof of an HO scale steam locomotive cab. From there the subassemblies are passed down the line and each worker adds another part to complete each cab.**

But in the last decade, each year, there have been fewer companies making brass models and fewer importers importing them. Ongoing international economic woes have all contributed to this very natural decline of a mature industry. It's no wonder there are fewer choices that cost more money than ever before. Then there's the absolute fact that most (80-90%) of the innovators who made this industry what it was have either gone out of business, retired, or passed away. These were the people who started the industry, got it through the growing pains, enjoyed the high point, and reaped the rewards before the downside set in. This includes the importers here in the US and the brass manufacturers in Japan and South Korea alike. More than a dozen importers and more than a dozen brass manufacturers have vanished from the scene. Together, they account for thousands of different brass models made between about 1975 and 2010. Only a

few players remain active in today's marketplace. There's also competition in the marketplace in the form of high-end customized plastic models. No matter how you slice it, each year it gets more difficult and more expensive to produce brass model trains. Enjoy them while you can because like everything else, they won't be around forever.

Join me as I share an insider's view into the world of the brass railroad model business. My professional work as a Model Designer, Research Specialist and Quality Control Manager put me smack dab in the middle of the high point in brass model production. It afforded me the rare and unique opportunity to work in the Korean factories.

Through my photographs I can show you what it was actually like inside the factories where these models were made by hand, one at a time, by ordinary everyday people. I'm not going to show you pictures of the multitudes of models we built and marketed. I'm going to show you the industry itself, the people who built these things, and the environment they worked in each day. I believe this should be a story about the people who arrived at the factory to do their job each day. Because they

were able to design and build nearly exact scale models of prototype trains with nothing more to go on than the set of plans and the photographs they were given. They never actually saw any of these trains in real life. To me, the true miracle of the brass train business wasn't the guys with the thick wallets who started the companies. It wasn't even the models for that matter. I think it was the people who made the models without being modelers or collectors themselves. They didn't have any prior knowledge about the prototypes. They didn't even have a model railroad hobby in their own country. The people who built these amazing brass railroad models for US, UK, European, Japanese, and Australian markets did this job to earn a wage to pay their bills and put food on their dinner tables for themselves and their families. This is the story I want to share with you through my pictures.

**Brass Trains | Page 10**

## SIERRA DIVISION

Next Meeting: Saturday, May 12

Place: 195 Placerville Road  
Folsom, CA

Time: 1 P.M.—Come early to see everything—read text page 2

## TIMETABLE

May 12

August 11

## SHORT LINE DEADLINES

July 6 for the August issue

Sept. 7 for the October issue



If you ordered a yard warehouse kit, it can be picked up at the May 12 meeting or at the PCR Convention in Medford. If picking them up in

Medford, give me a call. (530-520-3263) and I'll arrange a time to meet. Please have a \$5 bill. Completed buildings will be shared at the August 22 meet.

Thanks,  
Gary Ray

To see who met the flat car construction challenge, you'll have to



## SIERRA DIVISION AREA

## HOBBY SHOWS & RAIL-FANNING EVENTS

May 2 to 5



**Siskiyou Summit 2012** - Joint PNR / PCR Convention, Red Lion Hotel, 200 N. Riverside Ave., Medford, OR,

May 26—28???

Contact them to be sure

**Ione Railfair and Vintage Motorfest**— website not yet updated for 2012 but contacts are there to request more information. <http://www.ionerailfair.org/contact.html>

All,

Just received word from the convention committee that the Red Lion in Medford is sold out. If you have not yet made your reservations, you had better get things in gear.....**This is looking to be one heck of a convention and one NOT to miss!** We have a back up hotel available with the same room rate as the Red Lion. It's the Rogue Regency Inn & Suites..... contact the Rogue Regency Inn & Suites at 541-770-1234 or 800-535-5805 for reservations. The room rate is the same at \$82.00 a night. Mention "Siskiyou Summit" or the model railroad convention when making the reservation to get the \$82 room rate. Hotel address is 2300 Biddle Road, Medford, OR 97504. Web site is [www.rogueregency.com](http://www.rogueregency.com) for hotel directions. Make the reservations by phone to ensure getting the right room rate. The web site may not be programmed for it.

See you there,

Pat LaTorres, President, PCR/NMRA

## Brass Trains FROM PAGE 8

Most of what you are about to see has changed dramatically or disappeared altogether since I took these shots in 1987. I hope you enjoy seeing them as much as I appreciate having been able to take them. My wife will tell you that I really don't like flying. But the 22 hour flights to and from Seoul were well worth all the extra praying it took me to keep the plane in the air each and every trip.

(**Jeff Lemke** is President/CEO of **Twin Ports Rail History, Inc.** His company buys, sells, and appraises old railroading items from the Duluth-Superior region. Jeff's career in manufacturing started fresh out of high school when he was hired and trained as a mechanical engineer in the heavy equipment industry. Since 1985, Jeff has worked in the model hobby industry as a new product design consultant. He worked in Seoul during the 1980s as an agent of change in the brass manufacturing business. In the high technology sector he traveled the



world helping some of the largest enterprise software companies to improve sales through better understanding of the business value their products provided. Jeff was instrumental in the construction of two major model railroads, The Midwest Railroad Modelers Layout (Batavia Club) and the BN Missabe Division Layout. Jeff's writing and photographs have been published in many magazines and historical society newsletters. His collection of prototype information has helped to restore a number of full size diesel-locomotives including the GN 441 Locomotive Lodge Project in Essex, Montana. His interest in railroads is eclipsed only by his desire to help others to better understand those railroads. Today, Jeff helps to move the nation's freight as a Railroad Conductor with the BNSF Railway. He enjoys helping new conductors to learn how to do their jobs safely and efficiently. Jeff is married and lives in the Chicagoland area.— Thanks to Jeff's wife for the bio.)

**Jeff has 100 pictures on his web site of Korean model builders in action along with fascinating text. It was a very interesting look at how those fabulous models are made. It is well worth a visit. I spent well over an hour reading all the captions. Jeff will be coming out with a DVD this year.**

To take the tour, go to:

<http://www.twinportsrailhistory.com/>

And click on **Brass Railroad Models**.

-ed.



**This man is making final preparations to punch holes into the ends of 600 HO scale outside braced open hopper car sides. Each of the steel dies in the yellow tub were created to punch a single hole or series of holes into brass car sides that will be fed one at a time into the rotary punch. You can see a caboose side hanging out of the opening in the punch closest to us. That particular photo etched sheet was fed into the punch, the wheel rotated to actuate the punch, and the window openings**

**were created in this side of the car. The stacks of open hopper sides look more like box car sides at this point because the openings below the slope sheets have yet to be punched out. But by dinner time this man will have all 600 sides punched out. All in a day's work.**

I know you're probably thinking that the only way these brass building folks could possibly do all this soldering work is with expensive resistance soldering rigs with the fancy electrode tweezers and a rheostat with sufficient wattage to turn brass into butter. Well if you were thinking that, you'd be wrong. I thought the same thing. I was wrong too. This scene shows the end of a desk with a gaggle of homemade soldering sticks neatly hung up to cool off at day's end. I asked about the use of resistance soldering units and was led to a small office at the back of the production room. I walked into the room and there it was. The one resistance soldering unit this factory owned. I actually got to see it. It was packed inside a cardboard box that sat on top of a table in a corner of the shop foreman's office. I asked what it was used for and was told, "Nothing, too slow". It was too expensive to throw away so there it sat on that table inside a little box.



You see, the speed and ease of use that the simple homemade soldering sticks provided made the expensive resistance units a novelty, not a tool. In this kind of production environment the sticks could be made to provide any level of heat required with any size tip or blade to perform a multitude of different soldering tasks. Many workers had two or three different sticks to handle the different heat requirements for large and small parts. They had a production schedule to keep. They didn't have time to constantly clean the tips of resistance electrodes and reset the rheostats to get proper solder flows going. The resistance unit worked but it proved to be too slow and too inefficient in actual use in the skilled hands of the brass model makers who knew how to solder together thousands of parts in a single day with the tools you see here. Why on earth would they

change to a slower more expensive tool? That would be silly. I never brought up the issue again.



Here's what that NYC 4-6-4 looked like in the pilot model shop a couple of days before we got to see it at sunrise in the CEO's office. Much work had yet to be done. This fellow is working on the cylinders and front pilot assembly.



**When models are made in runs that number in the hundreds it's not unusual for the builder to make a few extra models. This is over and above what the importer paid to have manufactured. In this example these extra models belong to the builder. The reason they are made is so that if parts, or bodies, or drive mechanisms are damaged during the process of making the models (that the importer contracted to buy from the builder) there will still be enough extra parts left over to replace those damaged parts or models. This often translates into entire models being able to be built from all the left over parts. It's far easier and less expensive to create extra parts at the very beginning of the manufacturing process (extra parts you think you might need) than it is to have to create new parts at the end of a production run (starting from scratch and delaying production to get the proper number of units completed as contracted).**

**The builder's true first priority is making and shipping the models they were paid to build. Any extra models will be finished up and offered for sale to the importer at a later date. It's the importer's option as to whether or not to purchase these extra models if and when they want to buy them and the importer is under no obligation to import them. The quantity of extra models varied from no models at all to three or four on the average model run. One or two extra models was the actual norm. This caboose project numbered about 3,000 production units so the extras we see here still account for less than 1 extra model per 100 production models built. Ironically, whenever we hoped the builder made extras they usually didn't, and many times when we had a model that didn't sell very well the builder would send us a fax saying they had 25 extras. It was funny how this seemed to be the case all too frequently. No extras models for the hot selling models. And way too many extras when we couldn't sell the ones we had. Maybe it was Murphy's Law. Something like that anyway.**

Making Brass Railroad Models in the 1980s will be available on DVD during winter 2012-2013. The sample images in this gallery (<http://www.twinportsrailhistory.com/Trains/Brass-Railroad-Models>) should give you an idea about what to expect in the final product. If you haven't signed up for our free once-a-month e-newsletter please click CONTACT at the bottom of the Gallery page and request to be added to our list. All we need is your email address, first and last name. It's that easy. You can unsubscribe at any time. What's the benefit to subscribing? Simple. Our subscribers will be the first to know the details about exciting new products including topics we'll be covering, updates on the production schedule and final release date of our railroad CDs and DVDs, and most importantly the PRE-RELEASE PRICING AVAILABLE TO SUBSCRIBERS ONLY. If there's a topic you'd like to see included on this DVD drop us a line and we'll try our best to include that information for you. Our Brass Models DVD is in very early stages of production. We have a lot of information to pack in there. We hope to have it ready for prime time during the winter 2012-2013. If you like what you see here today then please tell a friend or two about us, won't you?

Cheers!

Jeff Lemke, President/CEO  
Twin Ports Rail History, Inc.

(Jeff, thanks for sharing this interesting insight into brass model building. Jeff also has Twin Ports Time Machine Vol. 2 currently in stock covering the Northern Pacific Railway. Those are \$39.99 with free shipping.—ed.)

# UCD Pediatric Clinic

Photos by  
Ed Pultz

Right: **Bob DeWitt** checking a piece of track before installation.



Below left: **Clinic waiting area.**

Below right: **Track above reception desk.**



Left: **Bob DeWitt** cutting track to fit.

Right: **Dick Kreutzer** and **Bob Warner** taking a break in the UCD Pediatric Clinic waiting room with track overhead.



*More On  
the Ground*

*Photos by  
Mike  
McReynolds*



**Where do we start?**



**Taking a strain.**



**First piece of the puzzle.**



Lining up on a good rail.



## Photo Gallery

*Photos by  
Dave Mussatti*

(David mailed me these original prints which have been mailed back. Mike emailed jpegs. Readers are encouraged to send photos that **THEY HAVE TAKEN** as full size RAW, JPEG, TIFF, or prints to the editor. A caption would be nice. Do not send pics that you did not personally take.)



Tom Dill points to SP4404 that he used when working in Eugene. Both are now retired. Pictures were taken in September of 2010 on a trip to the Portola Railroad Museum with Allen Wood, Klaus Keil, and Gary Ray. Tom is back in the engineer's seat again.



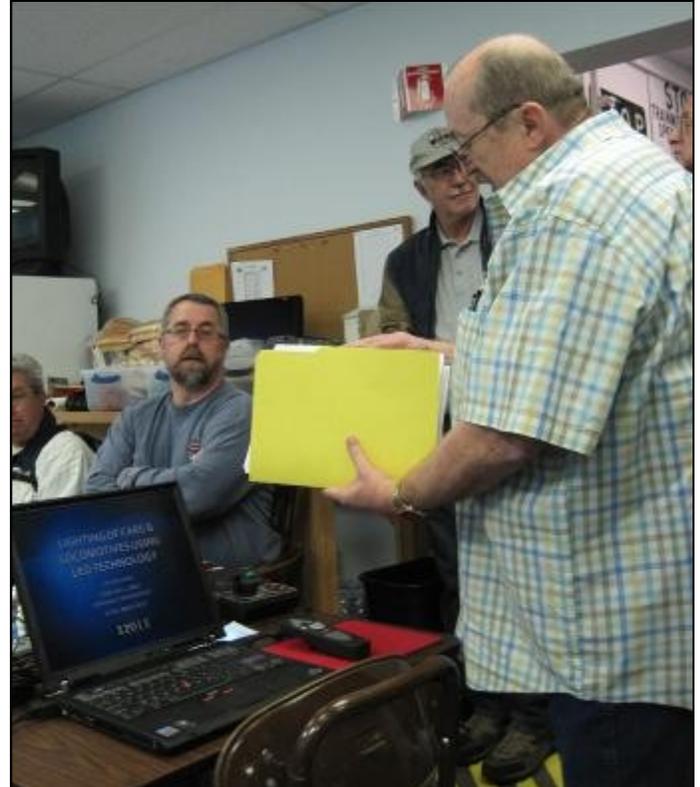
*More  
Photo Gallery*

*Photos by  
Gary Ray*

## Sierra Division Meet in Sacramento on February 4, 2012



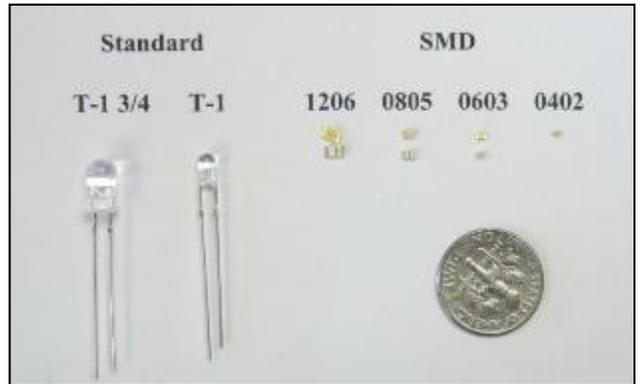
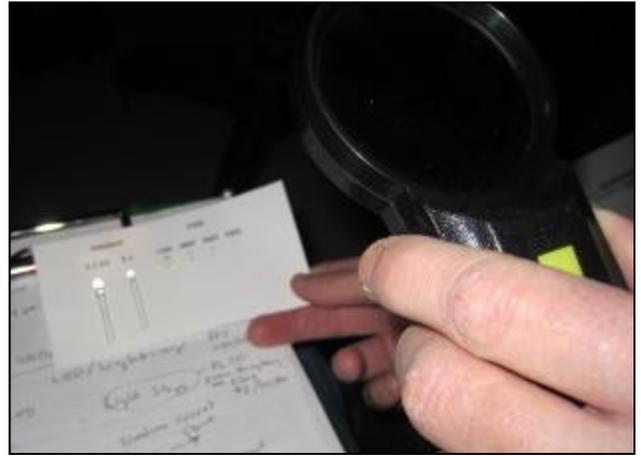
Bob Schott gave a talk on Operations on our host's layout, the Sierra Central Railroad.



Joe Melhorn did a computer presentation and gave a handout on "Lighting Cars and Locomotives Using LED Technology." A copy of the handout can be found at: <http://www.x2011west.org/handouts/Lighting-of-Cars-Locomotives.pdf>

Attendance was standing room only.





<http://www.x2011west.org/handouts/Lighting-of-Cars-Locomotives.pdf>

Joe shares LED's on a strip. He displayed some very tiny LED's that are available.

Originally there was to be a clinic on the Sierra Central's signaling system but for some reason it was not presented. There is a link from the National Convention X2011 West that might help:

<http://www.x2011west.org/handouts/Trackside-Signaling-SMRHS.pdf>



The article is by Joe Melhorn and Dave Megeath. There are additional links at the end.

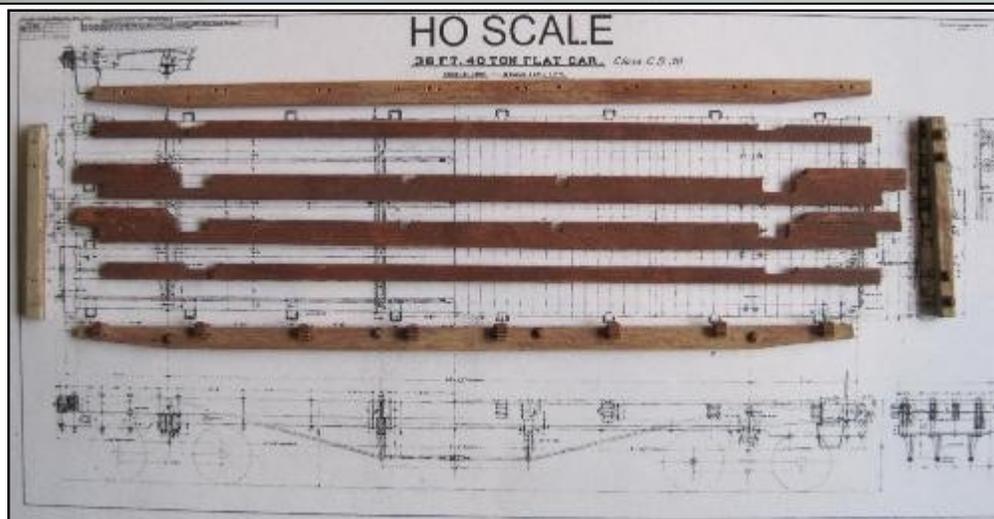
(images used with permission)

### Fabricating searchlight signals

- LED's
  - 0603 series SMD LEDs
    - 1 green (as red)
    - 1 red (as green)
    - Some wavelength used in traffic signals
    - Built face to face, common cathode
    - ACC into head casing, light pipe used to diffuse & carry light to lens
- Brass ladder & target etchings
- Resin cast components
- Cost effective compared to off the shelf @ \$12.50/head

Mail ordered LED's from China

The Flatcar Building Contest turned out to be a non-contest. Only one car was displayed. Gary Ray cut all the wood for the flatcar and load from sheet stock to make this Southern Pacific CS-30, one of three under construction.



Oldies—the above hopper is constructed of paper and wood in 1942. Below is an early Mantua flatcar. Shared by Harold Elmore.





Members line up for the Sacramento Model RR Club barbequed hamburger and hot dog luncheon.

After lunch, members were invited to operate on the Sierra Central layout. Ed Zies was among those who took advantage of the offer.

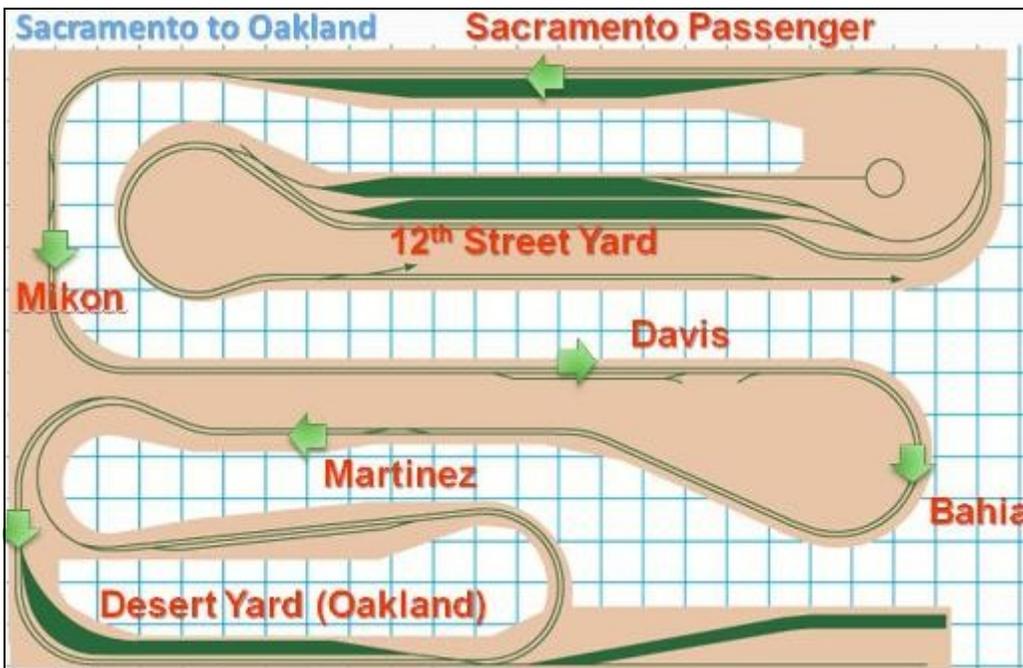




# Prototypical Operations

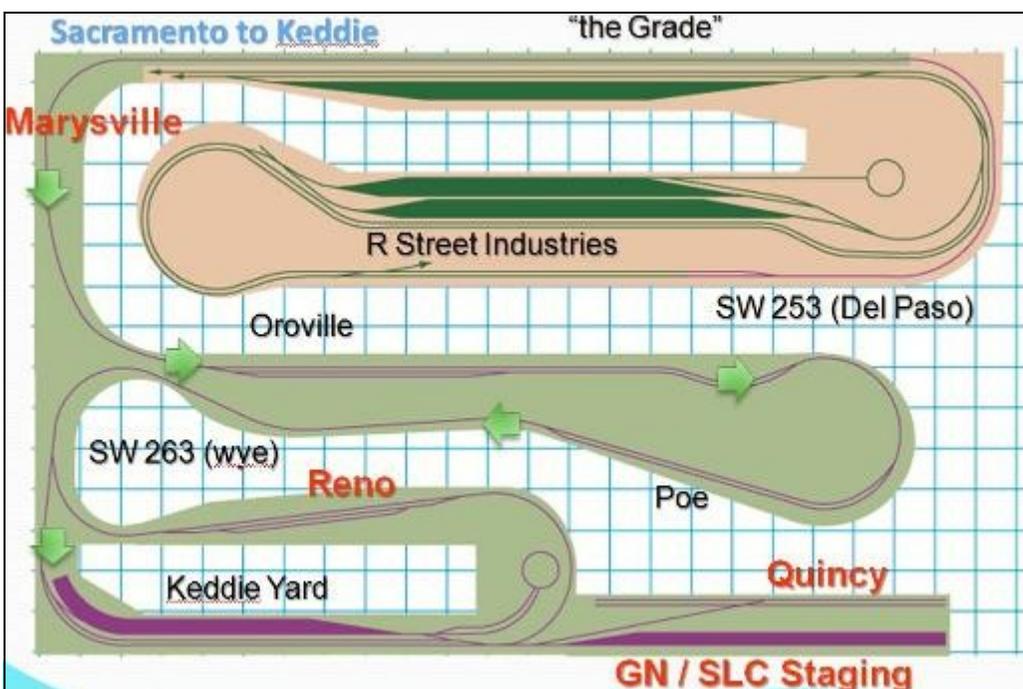
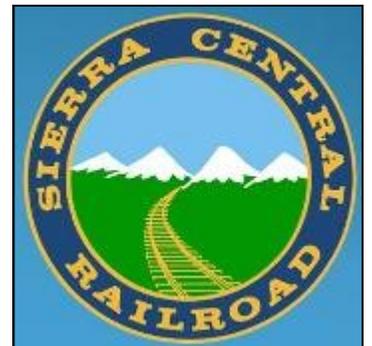
Sacramento Model Railroad Historical Society  
HO Standard Gauge Layout  
February 4<sup>th</sup>, 2012

By Robert Schott — permission granted for use



Bob was kind enough to share parts of his slide show. There are some great ideas here for car card operation.

See page 5 of this issue for more info. -ed.



Lower Level

Upper Level in green.

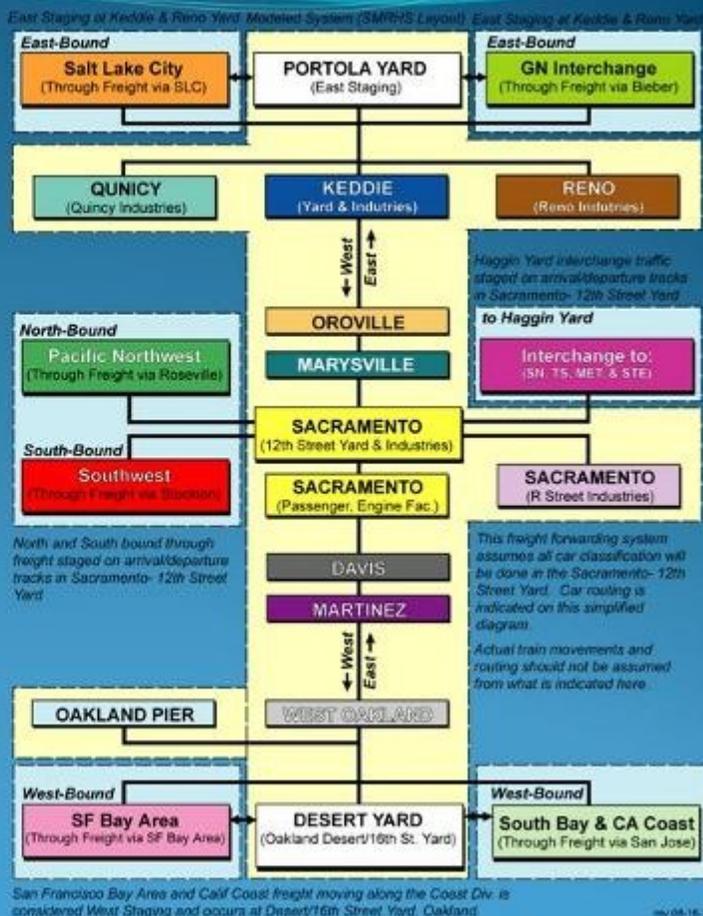


# System Schematic - Freight

OPERATIONS WAYBILLS

## Color Coding

All destinations for freight cars have a unique color.



## Waybills



## Waybills for Online Industries

FM 1

EMPTY CAR ORDER

via Sacramento

Quincy, CA

Sierra Pacific Industries

WP-QRR

Lumber Loading

Yellow bar indicates delivery to online industry

FM 2

WAYBILL

to Sacramento

12th Street Yard

for classification

Loaded

Double yellow means car is ready to be pulled from industry

## Loco Card

This card has lead unit information.

DCC codes for lighting and sound

Lead Unit: Santa Fe 929  
DCC Address: 929

ATSF 929 S24  
PRR W00001 0001  
ATSF 703 GP9

Other units in consist

Features:  
 Standard Functions  
 Sound  
 See back

Standard Functions  
F1 Lights on/off  
F2 Bell  
F3 Whistle/horn

Owner: Bob Schott  
Date: 1-12-2012

"Handle" to communicate with Dispatcher.

"Steal" this DCC address.

## Bad Order

If a car is defective, fill out a Bad Order and remove the car from the layout.

### BAD ORDER

Reporting Marks

RR: No

Performance

Details often

De-couples often

Leans to one side

Excessive wobble

Couplers

Missing/Broken

Too high or low

Pin adjustment

Missing spring

Wheels/Trucks

Missing/Broken

Out of gauge

Truck won't turn

Dirty wheels

Front

### BAD ORDER

Misc.

Loose weight

Detached parts

Loose detail

No owner ID

No detection resistor

Other (describe)

Issued by: \_\_\_\_\_

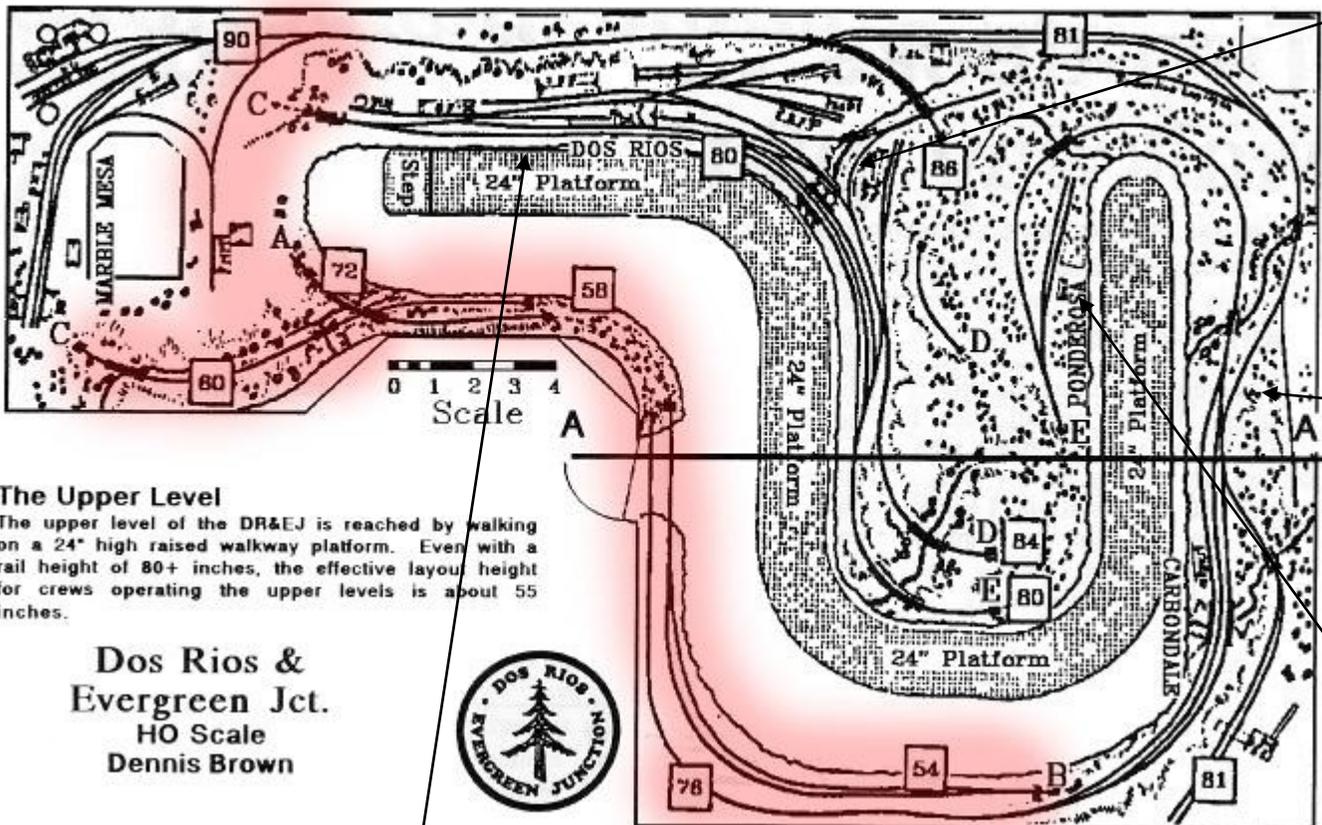
Date: \_\_\_\_\_

Back

## Get Part or All of a Layout for Free

Dennis Brown of Red Bluff is giving away his layout. It had been moved from a previous location with the idea of taking a multiple level layout and making it single level. Most sections have not been reconnected. Scenery is light weight geodesic foam. Track is hand laid code 83 as are the switches. Switches have manual switches on the layout fascia (slide switches for frog polarity and control rods to turnout). Black triangle tabs control magnetic uncoupling that lift up. Originally wired for rail command and should be easy to hook up DCC. Dennis is looking to give away sections or the entire layout. He can be contacted at: [drejrr@theskybeam.com](mailto:drejrr@theskybeam.com). The track plans are from the original layout and photos have arrows to help show track plan for that portion. Red parts are non-existent.

### Multi-deck railroad design







# FREE

All or part of the layout is available (not including any buildings). Because scenery is geodesic foam, it survives the moves with no damage. Previous move was made using an open trailer and pickup.

