



SHORT LINE

Sierra Division * Pacific Coast Region * National Model Railroad Association

1955 SP Dunsmuir Shasta Division

contributed by Walt Schedler



The
World's
Greatest
Hobby!

Inside This Issue

- Great Web Sites
- Steam Era Freight Car Weathering
- Division Meet Weathering Pictures
- Graffiti
- Folsom Turntable
- Jack Delano Pictures
- Chalk & Alcohol Weathering
- Weathering PFE Cars
- Weathering Couplers
- Walt Schedler Planning for Ops
- Folsom RR Museum



loop design and features three main line freights and three passenger trains: the Klamath Mail Train, the Cascade and the Shasta Daylight.

Presently there are about 300 feet of track. When completed there will be over 10 scale miles (600 feet) of Main Line. The Layout is 24 by 42 feet - around the room, with a peninsula in the middle and dormers on each side.

Once around the room is 180 feet or three scale miles. Level One staging is at Gerber, under the peninsula, about 40 inches off the floor. Level One also includes the Gerber, Red Bluff and Redding stations.

Level Two has Dunsmuir, at 55 inches above the floor. It is the main viewing point as you enter the room. It takes up over 35 feet, in length and covers about 175 Sq. Feet.

Shasta Division | Page 3

(Walt Schedler's layout is on the tour schedule for X2011W. More information on the layout and designing an operations scheme can be found in the digital version of **Short Line**. -ed.)

The 1955 SP Dunsmuir Shasta Division layout is built in a 1,200 Sq. foot room. It has four levels and is viewed from the main floor or elevated walkways. It is a loop to

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

Sierra Division Callboard

PCR business or questions:

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to volunteer to give a clinic, for mem-
bership problems,*

SHORT LINE

subscription or address problems:

Superintendent

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SHORT LINE is published quarterly by the Sierra Division of the Pacific Coast Region of the National Association. Material may be reprinted with permission.

Articles, photos, tips, or ideas are heartily encouraged and will be enthusiastically accepted! The preferred format would be in Rich Text Format (RTF), with photos as JPEGs, but we will accept any format (from a PC or Mac; MS Word, Simple Text, typed, or handwritten). Send it to your editor by regular mail to **SHORT LINE**, 6601 Ray Family Lane, Magalia, CA 95954 or by email to gerber1926@gmail.com.

If e-mailing put EDITOR in the subject line.

From the Superintendent

This is the second issue that Gary Ray is putting together. Didn't the last one look great!! **It will look better if he gets some material from the membership.** Think about the modeling that you are doing and try to share it with the rest of us. I know many of you have a story that you can tell.

We are still looking for people to help in various areas like International Railfair Coordinator, International Railfair Director, contest chairperson and others. We are also in need of a new Division Director to replace Mary who will term out in a year. We have to have nominations done in October. We really need some people to step up and volunteer for different positions. These are not hard to do or take a lot of time. If several people do different jobs it isn't a burden on anyone

Our next Sierra Division Meet will be April 9th. It will be at the studio of Ed Asmus. This is located at 2998 Franklin Blvd, Sacramento. It is at the corner of 5th. We will have 2 clinics. The first is "**35 Years on the Sacramento Central**" by Dick Witzen. The second is the **photography clinic by Ed Asmus.** He will cover Composition, Lighting, Depth of Field, Focus, Set up and Location, Lens Selection and Resolution and touch on Photo Shop. Bring your photography equipment. **We will start at 10:30 a.m.,** have a clinic, and then a lunch break between 2 and 3 p.m. and then the Photography Clinic. We will make a lunch run to a local eatery and get the orders to go so we can all be together for lunch. Scott McAllister knows of a Mexican Restaurant where we will get burritos and tacos for about \$5. The Division will get some drinks.

To follow up on learning about photography we are going on a Photo Shoot on June 4. We will meet at Sierra College and Interstate 80 at 8am. There is a park and ride there. We will then take a ride up the Feather River Canyon to Portola Railroad Museum for a photo shoot.

If you would rather **carpool from Paradise**, give Gary Ray a call (530) 873-0626. He is arranging rides from there. Also give Gary a call if you want to set up a carpool from the **Reno** area.

(Thirty people filled out paperwork to be part of the Sierra Division's Contact List. For events like carpooling or getting a hold of others, this could be a great tool. If you want to be added to the list, there is a sign-up form on page 11 of the Digital Short Line. Almost sixty have signed up for digital delivery only for the Short Line. Let Jim or I know if you wish to switch. - Editor)

At the **October Division Meet we will have a Photography Exhibit** for everyone to bring their photo from June 4th and other times as well.

The August Sierra Division Meet will be a picnic at a location TBA.

I would like to see a lot of Sierra Division people at the Sonoma Short Line PCR Convention on May 13 to 15. The will be a great time.

From the Editor

The color **Digital Short Line** has grown to 38 pages in this issue. The emphasis is on weathering. Originally I wasn't going to put text in the expanded digital version, but had a lot of supplemental information for the basics in the printed version. If you don't have a computer or slow dial-up, perhaps you could view the additional content at a friend's house or the public library. Until I got a high speed link recently, I use to take a laptop to a public Wi-Fi hot spot. **If you are connected to the internet while reading the Digital Short Line, all the blue web addresses are interactive. Just click on them to go to the site.**

I'd like to thank those who contributed to content, either through original material or giving permission to publish existing articles here. **Walt Schedler** contributed a lot of information on planning and operations and has seven additional digital pages. **Model Railroad Hobbyist** (<http://model-railroad-hobbyist.com/>) had an article on weathering by **Charlie Comstock** that is included in the digital version. **David Mussatti** shared the original article about Folsom and **Bill Anderson** (president of FEDSHRA) and **Wendell Huffman** shared info with me about the Folsom Railroad Museum. **Miles Callan and Gary Christensen** gave permission to share their weathering articles as did **Tony Thompson** article from his blog at: modelingthesp.blogspot.com ..

Thanks to all!

The April, 2011, issue of **Model Railroader** has 14 pages on weathering cars and locos. For subscribers, there is also a short video on line using oils to weather.

I'm always in search of original content. Please contribute something if you can. If you have digital copies of 2 or 3 of your best Portola Railroad Museum Photos, email them to me for publication in the February, 2012 Digital Short Line.

E-mail notices will be going out this week to confirm your reservations for the **Sonoma Short Line Mini Convention**. Up to date information can be found at: <http://www.pcrnmra.org/conv2011/>

There is a new Yahoo group for those planning to attend the **2011 NMRA National Convention -- X2011 West** -- in Sacramento, CA this coming July. The group name is "X2011WestAttendees" and can be joined just like any other Yahoo group. Go to: <http://groups.yahoo.com/group/X2011WestAttendees/>

The purpose of the group is to let folks get in touch with others that they know (or may not know, yet) who are going to be coming to Sacramento. It provides an easy way to line up a roommate, to coordinate tour bookings line up car pools for the self guided tours and just to plan getting together with folks before you hit town.

Shasta Division FROM PAGE 1

It is built to mostly exact scale, using the SP drawings for trackage and buildings. The Dunsmuir South yard is at 44 inches and holds about 360 cars. It is over 50 feet long and the whole top end is to exact scale, using the SP drawings.

From Dunsmuir, through the Sacramento River Canyon, you travel over 250 feet as you pass through Small, Cantara Loop, Mott, Azalea, and arrive at Mount Shasta. Mount Shasta has an interchange with McCloud River Lumber Co. – then continuing on to the third level, you reach the Black Butte Wye. From here it splits to either the Siskiyou Line, which takes you to the lumber town of Weed where there is a turn loop and staging. Or head straight through Black Butte to Grass Lake and the K-Falls Staging yard and

return loop. Once you reach Grass Lake, you have traveled over 10 scale miles through the Sacramento River Canyon in view of Mount Shasta.

Walt Schedler - Owner-Superintendent-Designer-Builder

Built, over the last 2 and ½ years, with the help of my friends: Don Warmuth track work and car certification, Dr. Mike Andrews - scenery, Scott Inman and Brian Zine who laid the South yard, and in 2008: Harley Worthington, Darrol Wilson and Tom Baird who helped with the bench work.

(Walt is open to visitation. Contact him in Colusa, CA. waltschedler@yahoo.com 530-458-8383)

(more in the Digital Short Line)

Great Web Sites

NMRA Magazine Index is in beta 2.0. It lists topics by magazine group making it easy to search your collection. They are also looking for help. Give it a try at: <http://www.olimpia.com:8084/SearchPage.html>

To get ideas for weathering, it is great to have some photos to look at. I model 1926 and was looking for those rare color photos. I was able to find 1930's pics at the **Yahoo Flickr** web site—especially the Jack Delano photos. Most are from the Library of Congress. The site has different groups such as "freight cars."

I put sample 1930's photos in the **Digital Short Line**, but no current ones because they were copyrighted but numerous. They can be used for personal use. Search using terms such as *boxcar, caboose, freight yard, tank car*. Go to: <http://www.flickr.com/search/?s=int&w=all&q=Jack+Delano+railroad&m=text>

Shorpy is another site with photos from the Library of Congress and other sources. I especially like all the city and town photos from my time period. Find a sample at: <http://www.shorpy.com/node/5510>

Necessary Steam Era Freight Car Weathering: Boxcars

by Miles Callan: Author of *Interacting with Miniature Railroading*

Published with permission © 2005

<http://modelrailroading.wordpress.com/2008/05/05/necessary-steam-era-freight-car-weathering-boxcars/>

Ok, let's face it, there are too many "clean" model freight cars out there. Not to say that every car needs to be filthy, but there are ESSENTIAL basics that make a model stand out in quality, yet fit in with all the modeling you're probably doing along the line itself.

Here's a diagram illustrating some essential details:



1. A thinned DARK brown wash over the entire car is a great start to any steam-era weathered cars. Looking back on old color photographs, it seems like 90% of the cars out there had at least a light dusting of dark brown. The other 10% would be lighter colors for different regional soil colors. The dark brown wash looks much better than a traditional India Ink wash, and gives the lettering and details in the car more depth without it looking like a wash.

2. Rust it where you need it. I would start with a dark orange color for light rust, working into a medium/dark

brown for older rust and a dark brown with a hint of mauve (purple) for really old rust.

3. Rust those trucks up. Use DARK brown on the trucks, orange/brown on the coil or leaf springs.

4. DO NOT FORGET TO OIL THOSE JOURNAL BOXES with some GLOSS black. Try to keep the oily gloss on the bottom half of the Journal boxes, with more grimy black on the top of the journal boxes.

5. Chalk Marks are a MUST for steam era rolling stock. You can do these a number of ways. A sharp, PRISMA-COLOR colored pencil will do the trick, but be careful,

chalk marks will be small in any scale. To “decode” some of the markings, visit this website:

http://www.trainweb.org/oldtimetrains/CPR/general/chalk_it_up.htm

6. Most paint of the era didn't stick well, if at all to the galvanized steel roofs of the day. After some more extreme conditions, the roof would begin to oxidize or rust. Rust only where you think snow or rain would accumulate, or sit on the roof for any period of time. Sometimes the rust wouldn't come from the galvanized metal, but the nuts, bolts and other non-galvanized metal pieces, streaking down over the galvanized metal. Good areas for rust would be:

- Low spots on the roof
- Flat areas, or places where the angle of the roof levels out.
- Seams, joints or ribs.
- The peak of the roof, if the pitch is shallow or flat.

7. The tack board. Ignored by 95% of modelers, this all-important piece of railroad hardware was where you tacked any special instructions (on paper usually) on handling of the load inside the car. Cars in grain service, “Do not hump” messages, and other special circumstances required a message tacked onto the car.

8. Wear and tear on most boxcars happened where the door slid back over the body of the car. If the door was open during a rainstorm, or high-humidity situation, water would condense on the covered side of the car

and begin working on the wood. On steel cars this wasn't a problem. However, on steel cars, the forklift operators would frequently gash the sides of the car loading or unloading the car, and some careless operators would try to close the door USING the forklift, eventually leaving rusty gashes along where the door slides.

9. ON ALL CARS MAKE SURE YOU WEATHER YOUR WHEELS. On even the newest cars, the wheels, which are almost always unpainted all throughout their life, have already begun to oxidize starting right after they were first machined, well before the actual car would even have been built. My favorite way to go about fixing this is to use a dark rusty color, and using a paint brush, twirl it around the well in a circular fashion to give it a correct circular rust pattern from the irregularities done with HUGE lathes they used to turn the steel ingot into the wheel that it is now.

10. The areas around ladders are frequently dirty, rusty and even muddy from the brakemen climbing up the ladder from the muddy ground, wearing the paint off the ladder rungs with his shoes, and polishing the metal, which would eventually rust again.

11. The galvanized metal where it wouldn't rust can be modeled with a mix 25/75 mix of silver and light grey paint. The light grey paint should be most of the mixture, because as galvanized steel ages, it loses its shine and dulls into a gray color, with hints of sparkle left.

Whew! Well this is a lot of information to absorb, I hope this helps, feel free to correct me on anything said.

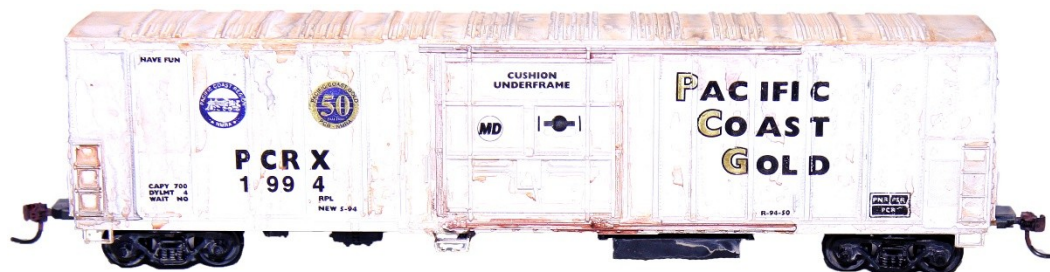
Weathered Cars from Sierra Division Meet on February 12

All displayed models are pictured in the Digital Short Line.



Dick Witzens won 1st place for his weathered stock car.

He also won 2nd place with this car that many entered.



GRAFFITI AND THE TRAINWAGON WAY

contributed by Gary Christensen

With permission © 2009

<http://theweatheringshop.com/articleg.html>



Ah yes! Once again the subject of graffiti and it's controversial status appears now in article form. However, instead of deeply pursuing the ever existing debate of whether it is right or wrong, I will expand more so here on how it can be applied to model freight cars in a realistic manner in 1/87 scale.

If we review graffiti and it's brief history in being associated with railroading, we'll find that originally it was used by transients to mark their destinations and make their presence known throughout the many hours and miles of travel via rolling stock. You'll find that graffiti in the days of the U.S. depression of the 1930's was nothing more elaborate than simple drawings done in chalk above the boxcar door tracks and along the lower car body sill. The small chalk "tag" was a way for the transient or hobo of yesteryear to denote an air of dominance within certain railroading regions or for the most part his expeditions. Nationwide, many names became famous throughout the decades from being scribbled upon railcars. Any historical rail fan can tell you that names such as Herbie, with his signature sombrero-ed man resting in slumber against a palm tree, was one of the most recognized chalk tags. So were names like Bozo Texino, Big Al and many others. These names became a common sight upon trains throughout the early years up into

the latter 1970's. (I can personally account for seeing these small scribbles back in my early years of rail fanning. Especially, the Herbie tag. It always amazed me how many trains I saw pass by with this particular name written on not just one but numerous cars within a long manifest.) These small chalk graffiti drawings would soon evaporate into hobo jungles and railroading archives at the dawn of the 1980's. This was the decade when graffiti would take on drastic changes.

Sadly, the now historic chalk drawings by some of the earlier rail tramps have been long plastered over and are rarely seen. During this new decade spray paint graffiti artists would emerge. This new era saw drastic changes in style and reason behind the applications of contemporary artists. From the mid 1980's until the present, graffiti has literally exploded into a rolling media by some extremely talented "rattle can" Picasso's.

Without delving too deeply into that age old debate, I used to view graffiti as an act of destruction and blatant disrespect to private property. Which, lawfully speaking, it should be strictly construed as such. However, with lax railroad security, these cars are getting worked on by some very talented artists. Legacies are being forged through these personal stamps of expression. When the day finally dawns on the absolute abolishment of graffiti, it will become historical. So yes, I personally view some of it as master works of art, regardless of each tags personal significance. Therefore, I have embarked on a journey for the past two years to replicate in my weathered model freight cars all the glory of what contemporary graffiti has become.

With history and views being pretty well covered, I will now spend the rest of this article describing what methods I use to replicate my model freight cars. I have been approached many times in weathering forums and in written correspondence by people asking how I apply realistic looking graffiti to my models. I have no issues with sharing with others the techniques of how I exact the numerous tags to my cars.

I will begin by covering what medium I prefer. The first thing I must say is, **LOSE THE GEL PENS PEOPLE!!!** These pens, though convenient, are nothing more than a quick shortcut to creating a tag! Most prototype railcar tags have been on the car for a period of time and most of them lack the fresh painted look you get with these pens. This is very, very important to keep in mind. Gel pens do nothing more than give the tag an unrealistic look. The paint in these pens is too vibrant. You're going to want to weather your finished tag to some degree and I feel this is a good mindset to get into before you get started.

Personally, I prefer working from prototype railcar photos. I want a 100% realistic looking car so why would I not want a 100% realistic looking tag? I've seen many model weatherers do this; create a beautifully weathered prototype model and then botch the entire car by applying decal tags or worse, using gel pens, sharpie markers or other quick method forms of pens....I'll reiterate it now!...**LOSE THE PENS!**

Some of you may want to draw the outline of the tag on your model with a pencil first. This is okay but be advised, this method, when used with water based acrylics or any other water based paint may cause the pencil lead to bleed into the tag. Especially if it is a light colored tag. I prefer to just freehand my tags. Starting at the model's extreme left, I will visually find certain characteristics on the model to use as guides and as parallels to work the tag from left to right. For instance, if there is a certain number in the reporting mark on the prototype and the model and if a certain part of the tag I'm replicating lines up on that particular number, I can assure that my tag is correctly being applied.

Next comes the application of the paint. I prefer cheap acrylics. I say this because these small bottles of paint come in a plethora of colors. They are inexpensive and easy to find in retail stores. Plus they are water soluble, are forgiving of mistakes and can be manipulated and blended well. That being said, I advise those who

wish to do tags as I do to not start by layering the paint. What I'm referring to here is that some prefer to draw the outline of the tag first and then fill it in completely with a base color. White, mostly. This might be okay, but what I try to avoid is the un-necessary build up of layered paint. Whether it is thinned or not, there will be another layer of color applied over the white and the multi layering gives way to an unrealistic, lumpy looking graffiti. I prefer to mix my colors on a pallet before applying the base color. For instance, if a tags color is generally a sea foam green, then I will look through my colors for a suitable starting color and puddle a few drops on the pallet and then grab another color to mix into the initial green. Then add until the correct color has come to surface. A quick note: never use stark plain colors directly from the



bottles,...this tends to give you a, well,..stark, unrealistic tag. Take black for instance, it's too bold! I never use "just black"! It doesn't look right. It gives the tag a cartoon look to it, I feel. I will always mix a slight bit of charcoal gray into the black to soften it and tone it down. Use mixed colors for the principal tag and then off-whites and solid colors can be used for drop shadows and tag outlines.

Once the initial tag has been applied to the car, I always fix it with a misting of dull-cote. Then I can start with the tag details after the dc has dried. I'm referring here to shadows of different colors or borders or small scribbles. To achieve the spray can look on these scribbles and borders, just add water to the color you're using to create a very diluted wash of paint. This can be puddled on a pallet and then picked up with a fine, soft haired brush. I always use soft brushes on my tags so I leave no brush marks. I am striving for a spray painted look. I also use micro washes around the existing borders or scribbles to apply a miniscule amount of diluted wash around the area of the hard line of my tag and brush it around and away from this main hard line. This will give you the over spray look common with most aerosol cans. Be sure to mist again with dc after it dries to preserve the micro-work done.

Graffiti | Page 8

Graffiti FROM PAGE 8

For these micro scribbles and details I use the smallest, finest detailing brush in my arsenal and I will then bring the soft haired brush to an extreme fine tip by wetting the bristles with saliva. I know, sounds weird, but it works to get those ultra fine lines and borders to a perfect preciseness. Believe it or not, it is these small details that bring the tags to life and bring them within the realism of their prototype counterparts. In fact, these small scribbles, border work, drop shadows and blended colors are the true essence of the realistic tag.

With the tag at it's completion, it's time for one final step that will insure a realistic look to the graffiti. This last technique requires little in the way of effort. I put a small dab of charcoal gray acrylic on my pallet again and take a wider brush than the fine detailing brush I used prior for fine lines. I pick up quite a bit of water and add it to the charcoal gray acrylic. This creates a very watery mix of paint. Next, I pick up a bit of this mix (very little) on my brush and I give the entire tag a once over with the brush of diluted, acrylic charcoal gray. This basically dirties up the graffiti a bit and tends to blend it into the rest the car so it does not appear to have been freshly painted on and gives it an air of road grime. Make sure this final step is done only after the graffiti has been sealed with dull-cote.

Creating realistic looking graffiti on our models can be challenging and fun. It can result in the enhancement of our prototype or fantasy model freight car creations if done with care, the proper materials and precision. I can only suggest these methods I use. Just remember the model is yours to do with whatever you wish and art is the liberty to express oneself in any way they wish. These aforementioned procedures and techniques that I share are not to be taken as gospel but rather a helpful instrument to zero in a more "true to life" looking graffiti. I would be glad to further share techniques & advice personally. Just contact me through the appropriate channels with the contact bar at www.theweatheringshop.com

Folsom Turntable

Initiated by David Mussatti

written by Gary Ray

David sent me a letter from an unknown source that led me to visit the historic Folsom Railroad Block. I visited with Bill Anderson, the President of the Folsom, El Dorado & Sacramento Historical Railroad Association (FEDSHRA). He shared with me the history of the rebuilding of the turntable and shared with me the complete history of the turntable in an article written by Wendell Huffman. It can be found on pages 36 to 38 of the **Digital Short Line**.

The association replicated the Southern Pacific 1867 "A" Frame or Gallows style turntable, which was 56 feet long. The Folsom Turntable pit was rediscovered in 1975 by Doug Hays. It was not unearthed until 1995 and FEDSHRA was founded the next year. Reconstruction was completed in 1999.

The Sacramento Valley Railroad was built to Folsom where railroad shops, a depot and a turntable were built. The turntable was used to turn locomotives for

the return trips to Sacramento. The Southern Pacific, who took over the line from Folsom to Placerville, discontinued service in the 1970's. The right-of-way was purchased from the SP by the Sacramento-Placerville Joint Powers Authority (JPA), a public entity formed in 1991 for the purpose of purchasing the 53 miles of the Placerville Branch right of way. The sale was completed in 1996. In the future, FEDSHRA envisions both community and excursion rail service linking Historic Railroad Block in Old Town Folsom to Latrobe and beyond. Photos from my visit are on pages 34 and 35.



SIERRA DIVISION

Next Meeting: Saturday, April 9
 Place: Ed Asmus Photo Studio
 2898 Franklin Blvd.
 Sacramento, CA
 Time: 10:30 AM to 4:30 PM



TIMETABLE

April 9
June 4 (see page 2)
August 13
October 8

SHORT LINE DEADLINES


July 9 for the August issue
Sept. 10 for the Aug. issue
Jan. 7 for the Feb. issue

Sierra Division PCR—NMRA 2010 Paymaster Report

INCOME		EXPENSES	
Interest	228.91	Banquet	79.60
PCR Dues Allocation	291.00	Picnic	325.89
Railfair	1489.56	Short Line	749.20
Convention Cars	462.60	Door Prizes	104.65
TOTAL INCOME	\$2,472.07	Web Camera	62.24
		Reno Layout Tour Maps	76.00
TOTAL ASSETS	\$38,688.21	TOTAL EXPENSES	\$1397.58

SIERRA DIVISION AREA

HOBBY SHOWS & RAIL FANNING EVENTS

May 13—15		PCR Mini-Convention , Finley Center, 2060 West College Ave., Santa Rosa. Go to http://www.pcrnmra.org/conv2011/
May 21		Redwood Empire Division Meet , Monroe Hall, 1400 West College Ave, Santa Rosa, CA. Meeting starts at 1:00.
June 12		Coast Division Meet , 9:00 am to 5:00 pm. Location to be determined. Check PCR Master Calendar at: http://www.pcrnmra.org/pcr/calendar/mastercalendar.htm
July 1-3		Extra 2011 West Advance Section , Hilton Newark/Fremont Hotel, 33900 Balentine Drive, Newark, CA. Go to: http://www.x2011west.org/advsect_Intro.html
July 3—9		NMRA National Convention , Sacramento, CA, go to http://x2011west.org
July 16—17		The Great Train Expo , Santa Clara County Fairgrounds, 344 Tully Rd., San Jose, CA 10:00 am to 4:00 pm. Adults: \$7, Kids under 12 Free. Go to: http://www.gtexpo.com/

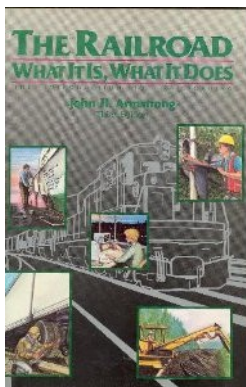


Steve Gust presented **A Day in the Life of a Dispatcher** to 24 members in Sacramento and 4 in Reno thanks to Skype. Steve was a SP and UP dispatcher for 39 years before his retirement. He covered job description, CTC machines, train graphs, historic changes, rules, time/speed/distance calculations, making time for MOW crews, and documents. If you missed his excellent presentation, it will be presented again at X2011W. Steve's volunteering to give a clinic was really appreciated. We would really like others to step forward and present clinics (2 per meeting is a goal). Contact Jim Long if you can help.

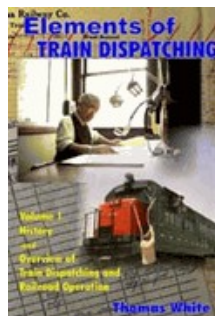
Suggested Reading

Steve suggested reading the following books to find out more about railroad operations:

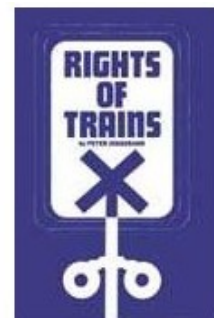
The Railroad: What It Is, What It Does by John Armstrong



The Elements of Train Dispatching, Volumes 1 & 2, by Thomas White



Rights of Trains
by Peter Josserand



Get to Know Sierra Division Members

Sierra Division has a contact list for those members who wish to be part of the program. The idea is to allow members to contact members for help, visits, similar modeling interests, or simply live in your area. The list is only distributed to those who wish to share their own information. Currently there are 30 members on the list. If you would like to be added to the list, fill out the form below and **mail back to: Gary Ray, Short Line Editor, 6601 Ray Family Lane, Magalia, CA 95954.**

If you like the Digital Short Line and are willing to switch to only on-line subscriptions, you can mark the box below. You will be notified a week before the paper version is mailed out. Please be sure to print your email address neatly.

I agree to have the following information sent by email to other **SIERRA DIVISION** members:

Name _____
(First) (Last)

Phone # (____) _____ - _____ City _____ State _____

e-mail _____

Layout Info: _____
Scale Name

_____ x _____
Era Size Decks Amount completed (UC=under construction or %
if track-work done)

Signature _____/Date _____

Switch my Short Line subscription from paper to online (check if desired)



Weathered Cars from Sierra Division Meet on February 12

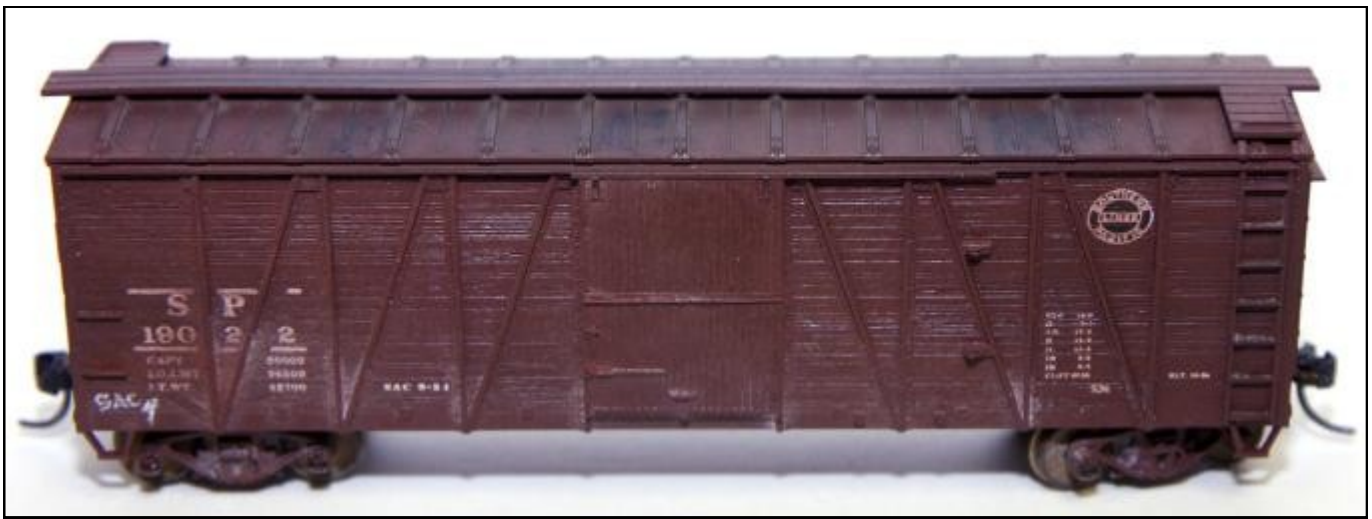


Congratulations to Dick Witzen's First Place in the popular vote at Sierra Division's recent meet. Dick was awarded ribbons for both entries.



Below is Dick's Second Place winner.





Gary Ray, your humble editor, entered these cars that tied for Third Place in the popular vote.

The SP car was done with weathering chalk and then sprayed with a flat photo finish lacquer. I was disappointed when I saw the shine in the photo which seemed more flat when looking at the actual car. Perhaps it was the electronic flash.

The NP car was done with pastel pencils and the same flat photo finish lacquer. These were my first attempts at weathering. Sierra Division informal contests help motivate us to try something new.

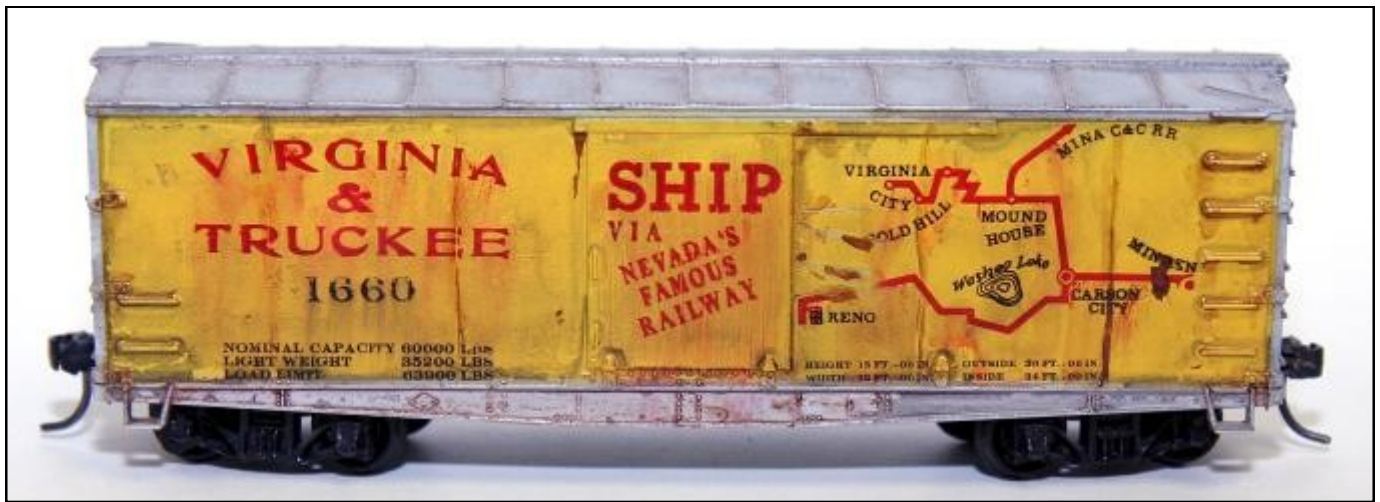


Top: Ray Keener

Middle: Pat LaTorres

Bottom: Ronnie LaTorres





Another Dick Witzten's entry.



(I tried to show top views and end views along with side views because we see so much of the roof as modelers. -editor)

The next contest will be photography at Portola Rail Museum. This will be after the Sierra Division's next meet that will be held at a photo studio. Be thinking about your best two to be shared in the Digital Short Line. Hopefully you can bring them on a memory stick.

Jack Delano Pictures ~ Weathering Ideas



Great [Web Sites](#) on page 4 shared about getting Jack Delano pictures from the 1930's.

Ahhh—the absence of graffiti.

Here are examples.



Notice the chalk marks (see page 5), grabs, and roof weathering. On Shorpy there are links to more modern cars, but most images were copyrighted so are not shared here.





Want more? Click here:

<http://www.flickr.com/search/?s=int&w=all&q=Jack+Delano+railroad&m=text>

Or here:

<http://www.shorpy.com/node/5510>

For more modern pictures try searching here:

<http://www.flickr.com/groups/freightyards/pool/>



The following article perfectly compliments this issue of **Short Line's** emphasis on weathering and was reprinted from the **February 2011** issue of **Railroad Model Hobbyist** under their policy: "You can even cut and paste content from the magazine into other forums as long as you also include a link back to MRH." It is reformatted to fit these pages. **Railroad Model Hobbyist** is a **free** digital magazine produced by Joe Fugate. **The content is excellent.** Give it a try at: <http://model-railroad-hobbyist.com/>



Weathering with Chalk and Alcohol

It takes longer to dry than to do ...
by Charlie Comstock

I've weathered cars with chalk powder for a long time. But only recently, I heard of using it mixed with alcohol instead of dry. I decided to give this technique a shot. It turned out to be very easy.

I assembled the stuff needed (figure 2): Alcohol, an old cup, powdered chalk in various weathering colors, a couple of brushes, and a freight car. I chose a single sheathed boxcar that would be pretty dirty by 1952, the year I model.

I poured some alcohol in the cup, then dipped the 1/2" brush in it. Next I touched the brush to the dark gray chalk powder and started 'painting' the model (figure 3). I covered the roof, then did the car sides. Neatness does NOT count.



Figure 2



Figure 3



After the dark grey, I used a bit of black chalk to represent decades of soot. The car will look very dark at this point (figure 4). I wanted this car to appear dusty, so I used some lighter gray chalk, too. I used a smaller brush to add rust around the iron fittings and on the trucks (figures 5 and 6) before blending the colors with the 1/2" brush (figure 7). Blending removes excess chalk. Keeping the car vertical lets gravity assist the process.



Figure 5

Figures 8 to 11 show the car lightening as it dries. If there's too much color, brush the car with plain alcohol to wash some of it away. If there's not enough weathering just add some more!

Once completely dry (several hours), you can optionally overspray it with Dullcote. Experiment with this step, Dullcote will change the color of the finish. I skip this step. Figure 1 shows the finished car in its natural habitat



Figure 6

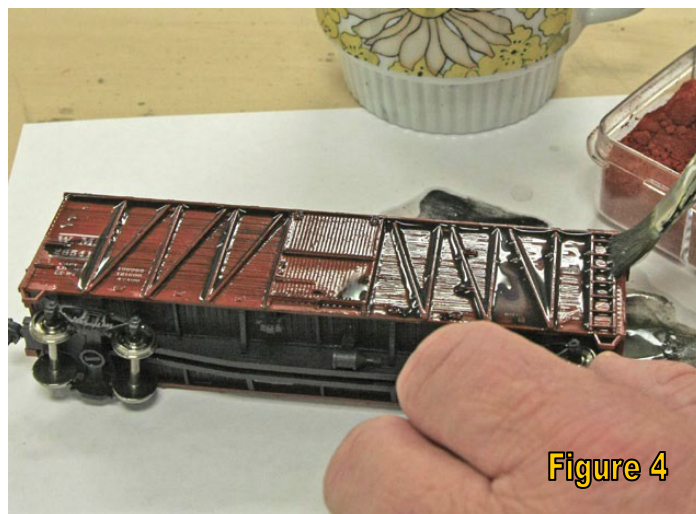


Figure 4



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11

Many thanks to Charlie Comstock and Railroad Model Hobbyist for this wonderful article.— Ed.

WEATHERING

Modeling PFE reefers in 1953

contributed by Tony Thompson
From his blog at
modelingthesp.blogspot.com

My first post on this topic had to do with car fleet size and paint schemes. It can be viewed at:

<http://modelingthesp.blogspot.com/2010/12/modeling-pfe-reefers-in-1953.html>

But in this post, I want to add something quite specific: weathering. Of course this is a relevant topic for all kinds of model rolling stock, but refrigerator cars generally are of particular importance because their (almost always) light-colored sides showed dirt and grime far more readily than their boxcar-red brethren among the freight car fleet. This was accentuated because the cooler sides of working reefers had a greater tendency to condense water from the steam exhausted by locomotives, particularly in tunnels, and this tended to trap dirt, dust and cinders (or oil smoke particles).

As modelers, we need to depict this grime accumulation, but also to recognize that a string of reefers would show a range of dirtiness, from fairly clean to pretty darn dirty.

It's natural to think of cars

longer in service, and with older paint schemes, as needing to be modeled with greater amounts of dirt and grime. But Pacific Fruit Express washed its cars from time to time up until about 1955, as described in some detail in the PFE book. (Anthony W. Thompson, Robert J. Church and Bruce H. Jones, *Pacific Fruit Express* (2nd edition), Signature Press, Wilton, Calif., 2000, pages 100, 117 and 159.) During the 1945 to 1948 period, for example, about 11,000 cars were washed per year, at a time when the total car fleet numbered about 40,000 cars. This means that there is *not* always a strong correlation of paint-scheme age and amount of dirt on PFE cars.

Here are a couple of prototype images showing PFE cars with a range of weathering and dirt on them, which can serve as a guide to modeling:

This first photo shows a T&NO switcher working at the Cities Service refinery in Lake Charles, Louisiana. The string of cars happens to have at its head three PFE cars which are neatly arranged in order of decreasing dirtiness. (This is a Southern Pacific publicity photo, from the John R. Signor collection)



A second photo shows a train of westward empties on Sherman Hill, Wyoming on the UP, behind double-headed locomotives in 1955 (cropped from a John E. Shaw photo). Here the dirty cars strongly contrast with one which looks relatively clean.



One reason to emphasize these prototype photos is that most modelers, myself included, tend to have a particular degree of grime that they are comfortable with, and to weather car after car to about the same extent. These photos show that such a procedure is not realistic.

One good example of varying weathering to obtain model cars looking like the range of grime in these prototype photos comes from Richard Hendrickson, long an advocate of heavier weathering than most modelers like. Of course he means “heavier” when appropriate, but reefers are obviously an important instance. Here’s four

of his models to illustrate the point (models and photo by Richard Hendrickson):

At far right is an almost-new car, which does have some light dust along the side sill and trucks. Then from left to right can be seen three cars of increasing dirtiness, and these most definitely do reflect the prototype range of weathering shown in the photos first presented. Note in particular

that Richard has successfully depicted the rather brownish tone usually dominant as the orange car sides got dirty.

I have been striving to extend the range of my own weathering beyond the “light to medium” I often apply, to obtain a few cars with serious levels of grime. I think this is an important goal to reflect the prototype in the 1950s.



Weathering Couplers



(I noticed in our recent contest, that most cars had un-weathered couplers. Mine were not weathered because I didn't want to mess with replacing Kadee springs that flew out when I use a brush to apply

Bragdon's Weathering Powders. There was a recent internet discussion that I hope you find helpful.. Below are comments that I had permission to publish. - Editor)

I use a 1:1 mix of Floquil Rust and Floquil Roof Brown thinned 3:1 with Testor's Universal Enamel Thinner. I've applied it with an airbrush or hand brushed it on, and when applied lightly, the couplers work fine. I 'work' the spring a few times while the paint is wet. If you want to cut the pin, do it after the paint is dry, and you've verified functionality.

Nelson Moyer

I mask off the rest of the car somehow - tape, post-its, index card with a hole cut in it large enough for just the shank, something - and then shoot it with the rust color of the moment, which is generally NOT "rust" but a darker color. Sometimes it's "greasy black" or whatever that color's called, with another shot of engine maroon or something like that. The key is to a) give them LIGHT shots, and b) to be sure the mask off the box, so the centering action doesn't get screwed up. If you're managing to gum them up, then you are using too much, way too much, paint.

Schuyler Larrabee

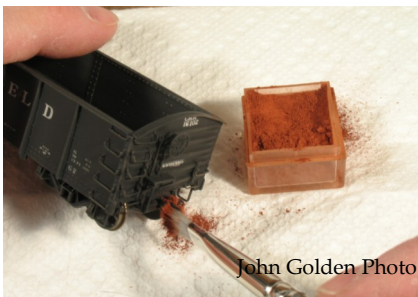
Get a "bag clip" at the grocery store, a plastic clip used to close potato chip bags. and put about 20 Kadees at a time in it, holding them by the shank, and shoot (mist) rusty and grimy colors at them - no two will look alike. A very

light wash is all you need! You can keep a whole bunch of painted couplers on hand.

Tim O'Connor

I've never had an issue with Kadee's after they were painted. I airbrush them as Clark mentioned, light coats and not directly into and onto sides/tops. I normally use Floquil and thin it down to where it's more of a tint and I use a couple of different colors for weathering. As you do, I also cut my trip pins off. One thing I do prior to painting is to file off the seam line on the face of the Kadee knuckle. To me that's the one thing that stands out especially in photo's. Why go to the trouble of weathering and then leave that dang seam visible. I don't think that seams removal effects the operation of the coupler either way, it's just a personal thing that bugs me...

Mike Smeltzer



First I paint the couplers lightly with a black or a dust/road grime color. Then I use a wide brush with the Bragdon's powders and just dust some of the powder on lightly, trying to get any on the rest of

the car. This is one of the very last things I do to a model after it's been painted and decaled, etc. After I dust on some powder I clean the brush up and then work it around the coupler, then lube up everything with Kadee dry lubricant and it works great. Occasionally I have to replace a spring but usually this treatment doesn't create a problem.

John Golden



I never use any weathering color "straight from the bottle".

To produce a rust tone try starting first with 1 part Floquil Rust with 2 parts Floquil Tuscan (or Mineral Red, or Oxide Red).

Paint that on something and look at it. I taken HO parts I've painted this color and put them on top of a proto coupler and wheel face (without grime) and they "disappear". But I also vary the 'formula' a lot ... some mixes have more tuscan, some have both tuscan and oxide, some have some grey or black mixed in, etc. My basic weathering philosophy is "variations on the theme(s)" ... if you look at my freight cars they all look the same (at first glance) ==> but then you will see that the specifics of the weathering on any one car are never the same as on any other car.

For couplers I often use either lacquer (Floquil) or acrylics and just 'touch the faces' (and top) of the coupler a few times.

"A little dab'll do ya." I've used any amount of dilution from right out of the bottle to an extremely thin wash. I often use a few dabs of weathered/grimy black on top of the rust color.

I have also air brushed couplers. When I air brush them I start by stuffing the shanks into some foam and then hit them

pretty much from all angles. Air brushing gets better coverage. but I like the "effect" of an appropriately thinned brush-applied wash better. Often I will use thin washes of brushed on colors on couplers/wheels/whatever - that have been air brushed first.

My first goal is to kill the shine. After that I want the colors to look "more appropriate". But, obviously, I want them to operate -flawlessly- first and foremost. I agree with your friends/buddies/hecklers who take you to task on the color of un-weathered couplers.

Perhaps this will help ... don't cut the glad hands off until the coupler is weathered - so you can use it to get everything working correctly.

Jim Betz

I've never had issues with painting Kadees. I use the air-brush, any paint; but I avoid shooting straight in from the sides or top, which sends the paint right between the bearing surfaces. Shoot from above at an angle, and below at an angle. Also, a couple of light (dry) coats will keep the



Gary Ray Photo

paint from pooling wet. Wet paint on the surface allows it to draw between the bearing surfaces. You've got it down when you don't have to do anything to make it work.

Clark Cooper

Get a "bag clip" at the grocery store, a plastic clip used to close potato chip bags. and put about 20 Kadees at a time in it, holding them by the shank, and shoot (mist) rusty and grimy colors at them - no two will look alike. A very light wash is all you need! You can keep a whole bunch of painted couplers on hand.

Tim O'Connor

I spray paint straight from the bottle and have rarely had a problem. I usually paint from the side to avoid hitting the car end. Maybe that's the secret of my success. If I do have a problem, a little working of the coupler and perhaps replacing the spring, solves the problem.

You might try putting a drop of oil on the glad hand bearing points before painting to keep the paint from setting up in the bearings.

BTW my color of choice is Floquil Rail Brown.

Andrew Miller

I've gone with a direct brush approach. I make a mix of Floquil rust + grimy black to get a shade a dirty/rusty/ not orange. I stay way from the spring and pivot points just trying to hit the coupler face, sides & top. Then I let it dry thoroughly and work it open/closed a few times. For the times I've gotten too much paint in the pivot/hinge area, the paint "crack" open once and shouldn't cause any problems after that.

Tom Casey



Gary Ray Photo

Two other suggestions:

Using a brush, mix Floquil rust and grimy black, hit the coupler face, sides and top but not the spring nor pivot points. When dry, work coupler open and closed.

If using Polly Scale, thin with distilled water per instructions (10 percent water) and 6 to 8 drops of Liquitex Flow aid per ounce of spray mix.. Airbrush couplers with several light coats of paint from different angles.

Walt Schedler's 1955 SP Dunsmuir Shasta Division

contributed by Walt Schedler and Gary Ray

On February 27th, Walt held his first operating session. Walt put a lot of work into planning for this first session. Samples of his paperwork used for planning the session are on the following pages. Perhaps it will help others with their planning. Track warrants were used to move trains. A lot was learned about successes and where improvements needed to be made. At this point, trains ran from Sims to Cantara Loop. The 4 deck layout is still under construction. Walt is looking for people to help with construction (see front page of [Short Line](#)). Give him a call if interested. Walt's wife, Carolyn, provided a delicious lunch that day along with the group photo. She also made 90 fir trees for the layout so far. Walt's layout is on the **X2011 West** tour.



Front Row (L to R): Allen Wood, Walt Schedler, Seth Neumann, Gary Ray.
Back: Robert Hoffman, Scott Inman, Phil Simpson, Tom Towner, Klaus Keil.



Klaus Keil and Allen Wood in Dunsmuir Yard. Actual prototype track plans were blown up to HO scale and then traced over for a very accurate rendering of Dunsmuir and the South Yard.



Owner Walt Schedler congratulating Tom Towner for a job well done.

NCE DCC controls the many sound equipped locomotives.

LAYOUT AT A GLANCE

Owner's Name: Walt Schedler

RR Name: Colusa SP Shasta Div (Black Butte Sub)

Website: none

Scale: HO

Size: 1208 Sq. Ft, 24 x 42 with two 6.5 x 7.5 Dormers

Prototype: Southern Pacific

Locale: Northern California, Shasta Division, Gerber through Dunsmuir to Grass Lake and Weed

Era: Fall of 1955

Style: Walk Around

Decks: Staging plus three

Mainline run: 600 + feet (320 completed) Gerber staging to Grass Lake and K falls staging

Minimum radius: 39" Main Line, 36" Siskiyou to Weed

Typical aisle width: 30+

Minimum turnout: # 6 in yard, #8, #10 and #12 on Main Line

Maximum grade: 2.2%

Bench work: Girders supporting Foam Core with hollow core doors in the yard plus Spline and open grid

Height: Lower Staging 40"; Dunsmuir Yard 43"; Downtown Dunsmuir 54"; Cantara, 65"; Mt Shasta 77"; Black Butte 80"; Grass Lake/K-Falls Staging 86"; Weed 85"

Roadbed: California Roadbed (Homabed) on Spline and foam insulation board

Track: Micro Engineering code 83/70 flex and hand laid on Central Valley Tie and Turnout Strips

Scenery: Cardboard strips, Plaster cloth and foam insulation board; 10% complete

Backdrop: Painted aluminum flashing (in the future)

Control: NCE DCC

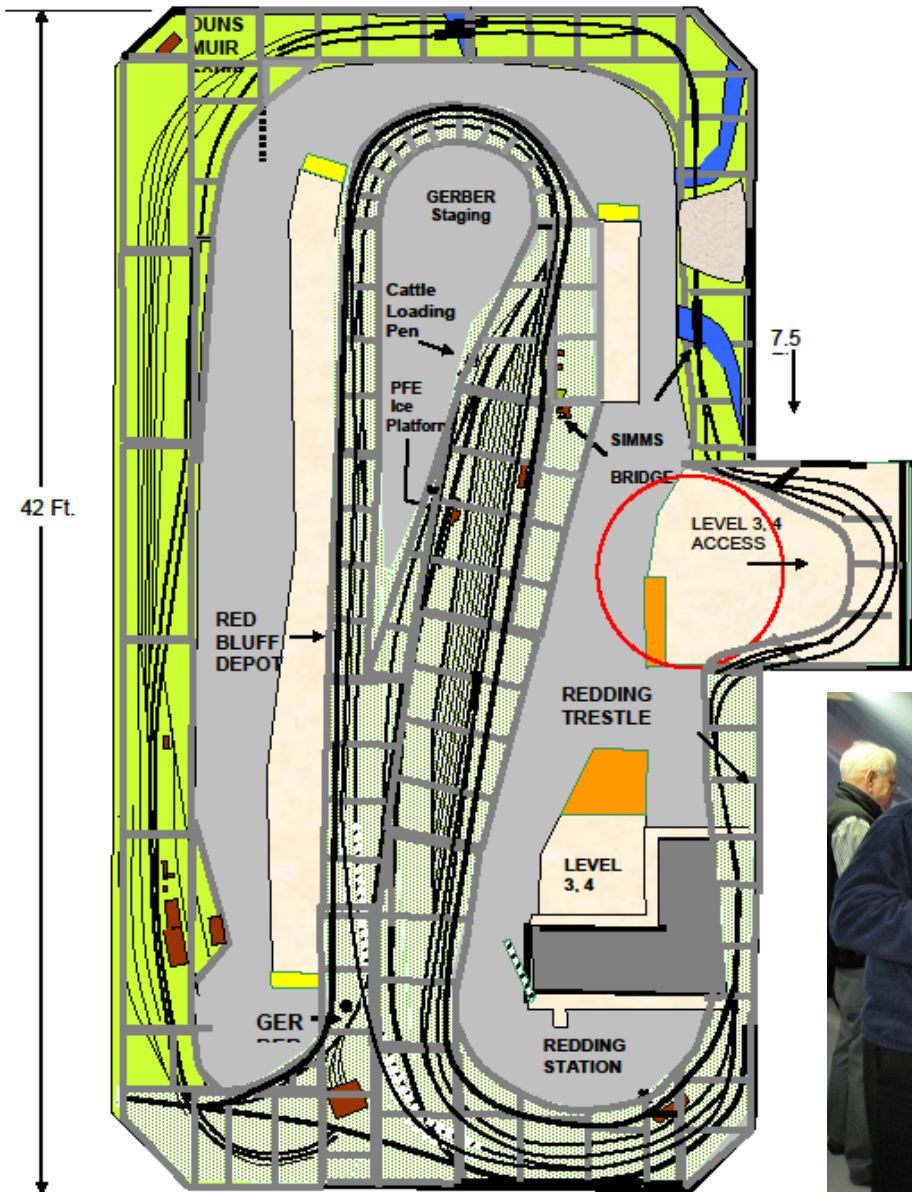
Operating Crew: 10-15

Operating System: Time table, Switch lists and Sequenced train Moves

Special Features: My Colusa SP Shasta Division is a Loop to loop to loop design, based on the SP operations through Dunsmuir, in 1955. South End staging is on the lower level at Gerber, located under the "Level Two" Dunsmuir peninsula. Northbound trains pick up AC-4, 5, or 12 Cab Forwards for a trip up the Sacramento River Canyon. Passing through the top end of the Sacramento River valley, the trains cross the Redding trestle, before attacking the steeper grades of the canyon. They pass through Sims, a small RR town along the river, that has a passing siding and two spurs. After crossing the river, North of Sims, trains pass through the tunnel and emerge, just South of Meers Creek. Here the Track diverges into the 50 foot long yard. From this point it is over a scale mile to reach Down Town Dunsmuir. It is here where Road engines are serviced and Shasta Division Helpers are backed down to the yard, replacing the Gerber helpers.

Trains leaving Dunsmuir make their way North, along the Sacramento, passing over the 1902 Pratt Pin Connected Bridge – Just North of Moss Brae falls. The trains snake their way through the Canyon, passing the 19 foot "Small" siding and onward they go climbing towards Cantara Loop. After crossing the Cantara Bridge, the grade steepens to 2.2% as they slowly climb towards the Tunnel and emerge just South of Sawmill Curve. They soon arrive at the top end of the 55 foot Mott/Azalea Siding, heading onward or pulling in for a meet with the Shasta Daylight or Cascade. Heading northward, they round a broad left hand curve and arrive in the City of Mt. Shasta. Here there is an interchange with the McCloud River Lumber Co. Leaving Mt. Shasta, trains proceed to Black Butte where the RR divides into the Old Siskiyou to Weed or straight through, on the Cascade line, to Grass Lake/K-Falls Staging. And so we are at the end of the line. There is also staging beyond Weed. Trains at the end of the line are turned and re-blocked via the loops at both weed, K falls and Gerber.

The whole top end of the South yard, over 40 feet, and 90% of downtown Dunsmuir, 35 feet, is "Built to Print." I used SP archive drawings, enlarged to HO scale, and traced them onto my bench work surface.



The first operations session ran from Sims on Level 1 through South Dunsmuir Yard and then onto Level 2 (see page 24) along the Sacramento River to the North Dunsmuir Yard.

Microsoft Word was used to draw the track program. Perhaps Walt will write an article explaining how he did this.

An early planning document was the timetable for the division.

Top pic: Robert Hoffman switches in the South Yard (left side of layout diagram).

Bottom: South Yard and River Track (Level 2) to Dunsmuir.



LEVEL ONE, SOUTH YARD AND GERBER STAGING

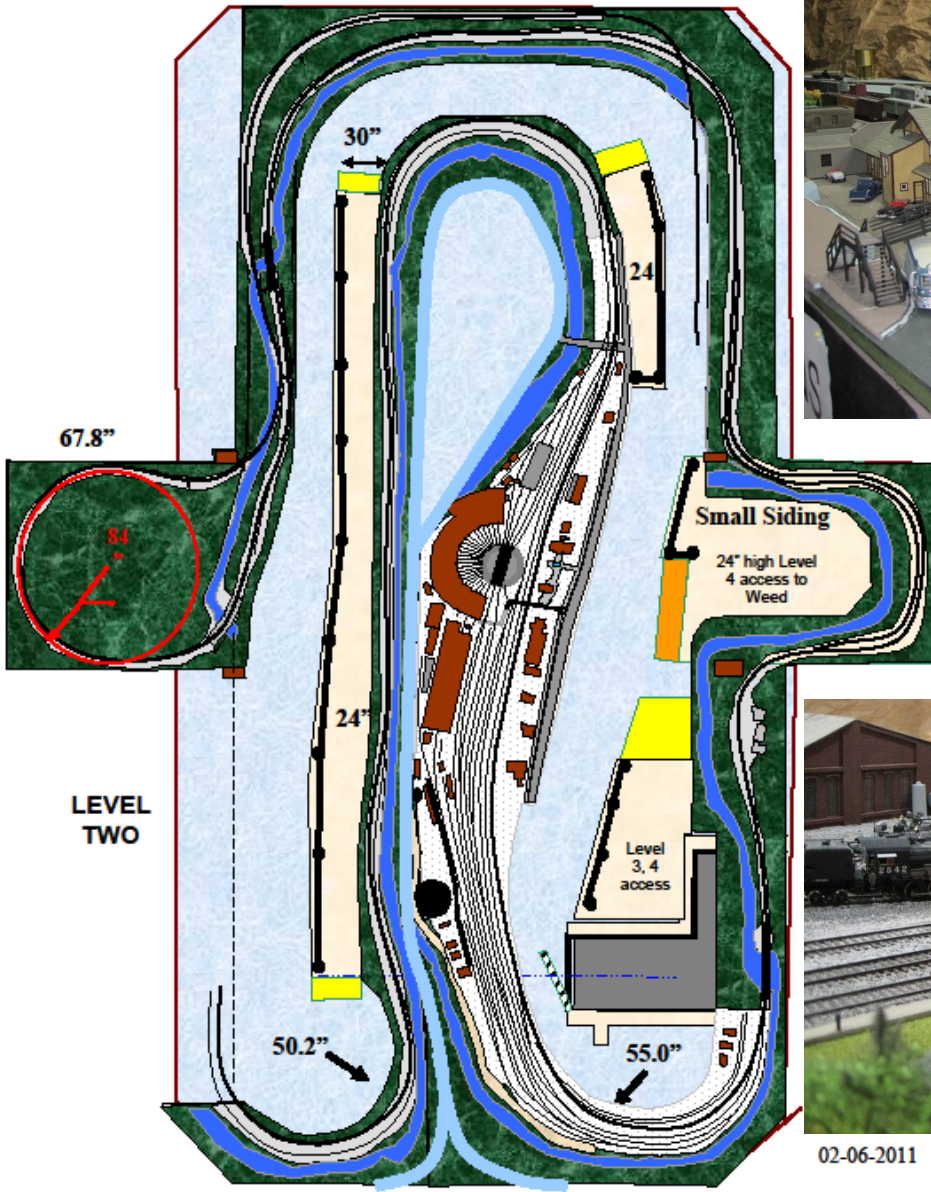
Walt Schedler Colusa, CA
REV A 11-05-2008
REV B. 10-15-2010, REV C 02-17-2010

Wouter de Weerd photo



REDDING SUB DIVISION Gerber to Sims 40 ft or 0.7 miles												REDDING SUB DIVISION											
Capacity of Siding	EASTWARD						FIRST CLASS						Time Table No. 64 Sept. 1, 1955 (02-03-2011)	Stn No	M. Fr. on K. Falls	WESTWARD							
	624	622	620	12 Cast	376 Merch	10 Shasta DELT	20 Klamath	378 P.C. Sep	Mile Post Loc	19 Klamath	9 Shasta DELT	377 Merch				11 Cast							
	L. Daily	L. Daily	L. Daily	L. Daily	L. Weat. Th	L. Daily	L. Daily	L. Weat. Th		Daily	Daily	Ar. We. Th, Sat	Daily										
Yard YBD	4:30P	8:30A	12:30A	10:40P	4:00P	1:40A	5:16A	6:38A	213.8	TO-R Gerber	11707	09:25 A	8:31A	5:33P	12:18A								
54 P				10:42	4:02	1:41	5:17	6:39	223.4	Red bluff	14301	09:29 P	3:08	5:31	12:14								
117 BKWP	5:48P	9:48A	1:48A	0:03P	4:03P	5:43A	5:18A	5:45	258.2	Redding	14344	09:49 P	3:07	5:30	12:13								
106 P				10:48	4:07	1:47	5:23	6:50		Sims	14389	10:6 P	3:02	5:23	12:08								
BLACK BUTTE SUBDIVISION												Freights average 25 mph, Passenger 33 mph											
Capacity of Siding	EASTWARD						FIRST CLASS						STATIONS	Stn No	M. Fr. on K. Falls	WESTWARD							
	634	632	630	12 Cast	376 Merch	10 Shasta DELT	20 Klamath	378 P.C. Sep	Mile Post	19 Klamath	9 Shasta DELT	377 Merch				11 Cast							
	L. Daily	L. Daily	L. Daily	L. Daily	L. Weat. Th	L. Daily	L. Daily	L. Weat. Th		Daily	Daily	Ar. We. Th, Sat	Daily										
360 BRP				10:52	4:10P	1:49	5:24	6:52	321.2	R. Dunsmuir Yard	14401	10:7 P	3:00	5:29P	12:06P								
BDKTP				10:57	4:13	1:50	5:25	6:55	322.1	TO-R Dunsmuir	14402	10:7 P	3:00	5:29P	12:06P								
109 P				11:02	4:17	1:55	5:25	6:59	326.1	Small	14406	10:0	3:14	2:49	4:46	11:57A							
144 P				11:07	4:22	2:00	6:30	7:04	331.4	Mott	14411	9:7 P	3:08	2:44	4:41	11:52							
116 P				11:08	4:24	2:01	6:35	7:08	333.5	Azalea	14413	9:6 P	3:07	2:42	4:39	11:50							
94 WP				11:09	4:25	2:02	6:37A	7:09	336.7	Mount Shasta	14416	9:4 P	3:01	2:41	4:38	11:49							
									342.0	Upton	14418	9:0				17.9							
									342.0	Doer	14421	8:1				20.8							
230 WYP	7:10 P	11:10 A	3:10 A	11:10 P	4:27 P	2:03 P	6:44 A	7:10 A	345.1	TO Black Butte	14424	8:43 P	2:39 P	4:37 P	11:47 A								
									345.2														
									352.2	Hothum	14431	7:7				30.6							
									357.2	Bolam	14436	7:3				35.6							
									360.7	Andante	14440	6:8				39.1							
									364.8	Cougar	14444	6:7				43.2							
E 107 W 110 WYP	7:16 P	11:16 A	3:12A	11:13A	4:29P	2:04 P	6:45 A	7:11 A	368.6	Grass Lake	14447	6:10 P	2:37 P	4:38P	11:46 P								
									372.2														
									378.2	TO-R K. Falls Vd	14508	0.8	7:51	2:50P	4:38P	11:43							
									429.5	R. Klamath Falls	14500	0.0	L. 7:50 A	2:50P	L. 11:43P								
									429.5														
	634	632	630	12	376	10	20	378															

Rule S-72, Exception, No. 10 is superior to No. 377. Rule 86 B. West extra trains originating K-Falls Yard are not required to clear Timetable Schedule Time of No. 377 between K-Falls yard and Dorns. Rule S-72, No. 12 is superior to No. 377; no. 10 is superior to No. 19.



02-06-2011

ROOM SIZE: 24 X 42 FEET PLUS 7 1/2 X 37 FEET ACROSS THE SIDE DORMERS
 Ceiling in the middle is twelve feet high
 Nine feet high in the dormers

COLUSA SHASTA DIVISION OF THE SP CIRCA 1955 - Rev. A

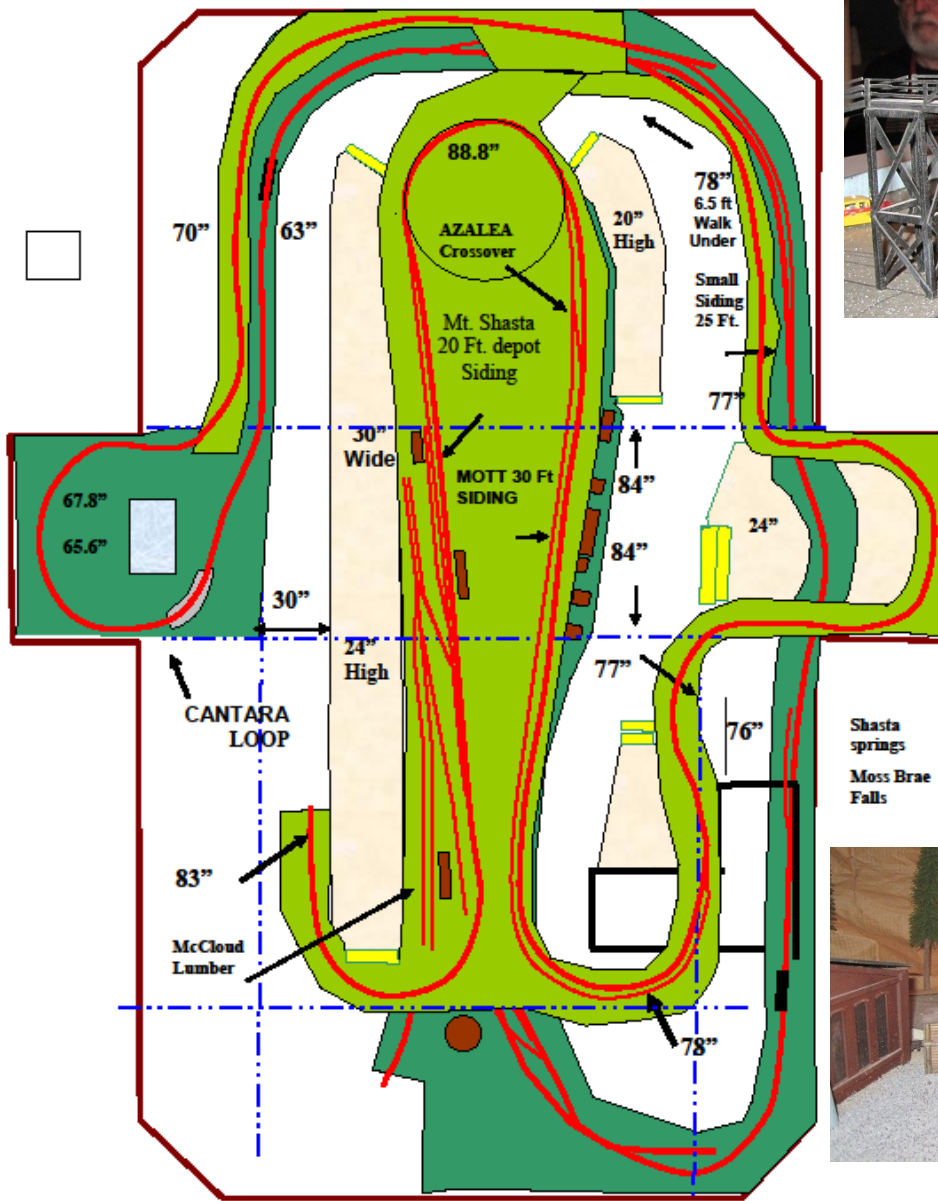
The Colusa Shasta Division Railroad operates from Gerber California to Dunsmuir as the main feature of this RR. It continues on to Grass Lake, the end of the Black Butte sub-division. Beyond Grass Lake, on the Cascade Line, there is a return loop, with staging, also known as K-Falls. It also separates at Black Butte onto the Siskiyou branch which terminates at Weed, with staging beyond inside the return loop..

BASIC OPERATIONS

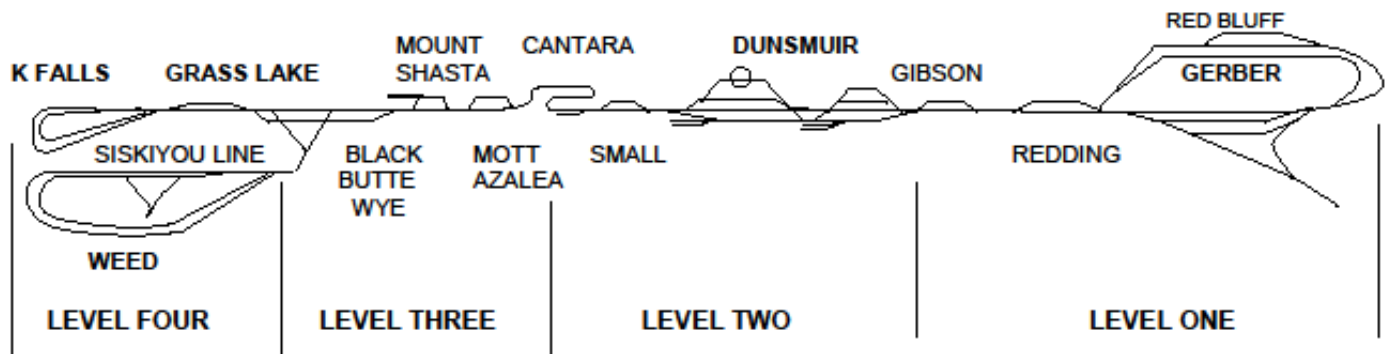
Configuration

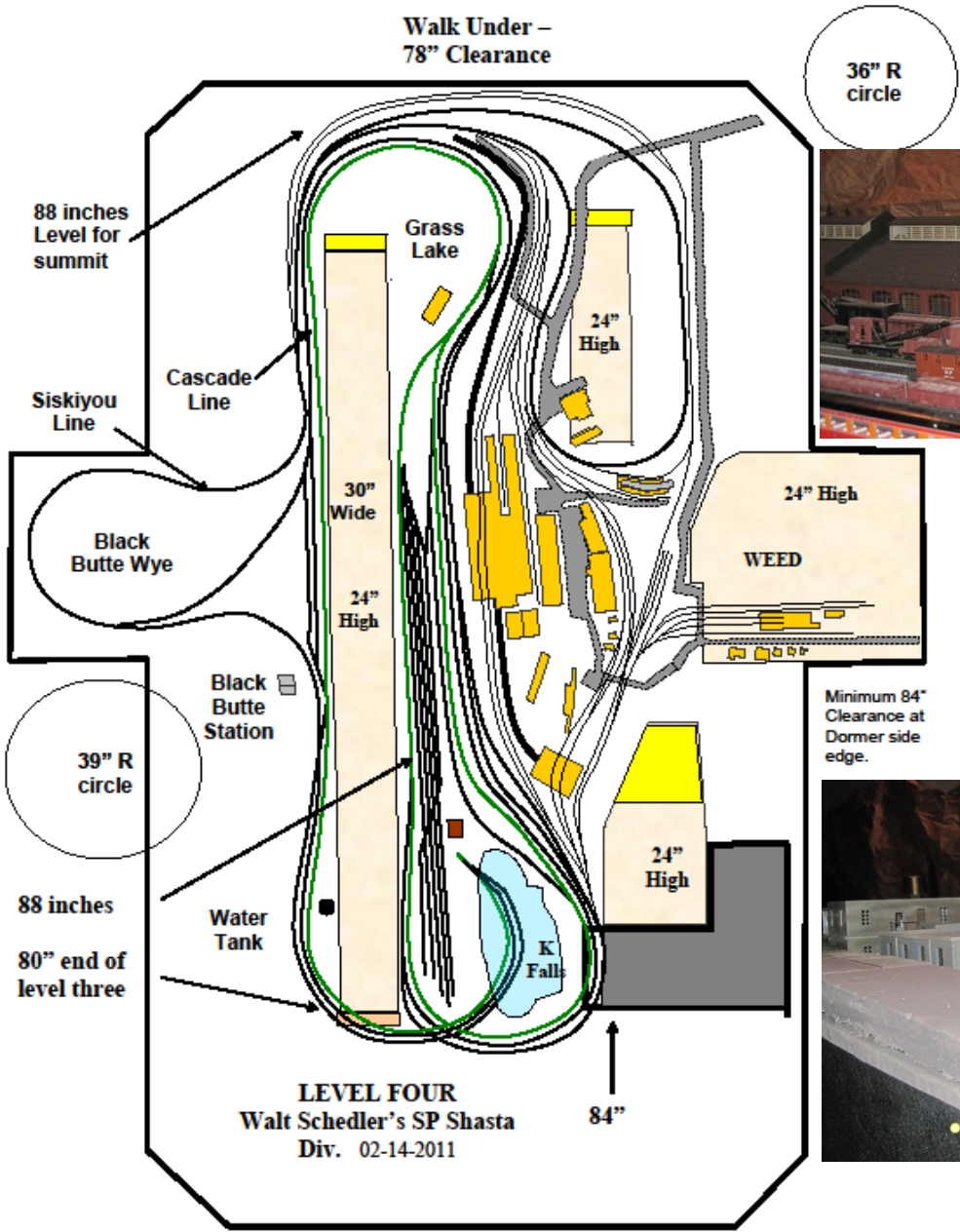
This is a Loop to Loop to Loop Railroad; operating from Gerber staging and loop to Dunsmuir, and from there to Weed (Wye and Loop/staging) and Grass Lake, terminating at K-Falls (loop/staging.)

Gerber is the main north bound (east) staging yard. It is located on Level One and creates and receives freights to/from the main scene. K-Falls is the major north end (East) staging yard and is located on Level Four. Weed is a major source of traffic and is located, along with its Wye and Loop, on Level Four.



LEVEL THREE, COLUSA SHASTA DIVISION





Minimum 84" Clearance at Dormer side edge.



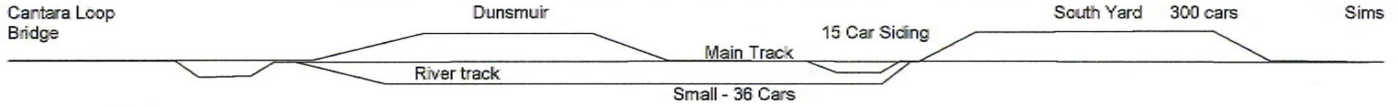
COLUSA SHASTA DIV TRAINS BY TIME TABLE - ON MAIN LINE

TRN NO.	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	TRN NO.	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 PM	TRN NO.
620	1:46												620													620
E	1:53												E													E
20					5:16	6:51							20													20
E					AM	AM							E													E
378					6:38	7:17							378													378
E					AM	AM							E													E
622									9:46				622													622
E									9:53				E													E
10													10	1:40	2:06											10
E													E													E
376													376				4:00									376
E													E				4:30									E
624													624					5:30								624
E													E					5:52								E
12													12									10:41	11:15			12
E													E													E
630			3:10										630													630
E			3:12										E													E
634													634							7:10						634
W													W							7:16						W
632													632											11:10		632
W													W											11:16		W
19							7:30				9:25		19													19
W													W													W
11													11											11:43	12:19	11
W													W													W
9													9		2:35	3:14										9
W													W													W
377													377				4:34	5:33								377
W													W													W

Modified Time Table for Walt's layout.

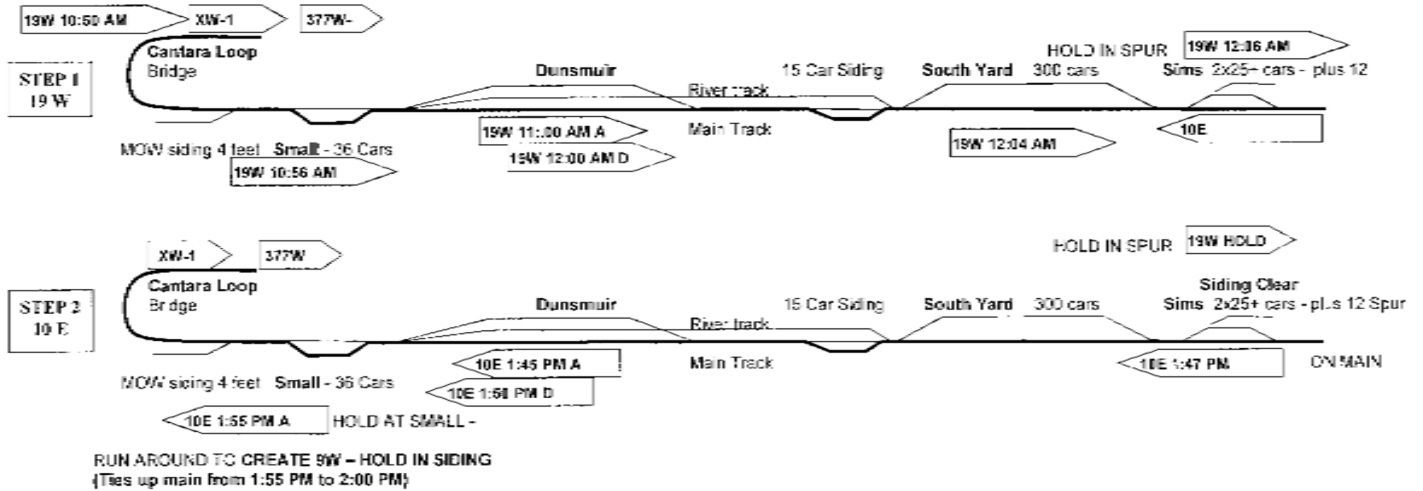
A lot of thanks goes to Dave Clemens who helped with the initial ops planning sessions.

COLUSA SP SHASTA DIVISION OPERATIONS PLAN



step	Cantara Loop	Small Siding	Dunsmuir Yard	Main Track	River Track	15 Car Siding	Yard		South Yard	Sims
							Y	M		
1	W Freight 2 POO W Shasta Daylight #9 POO	W Freight 1 POO	Helper Engine and Helper Crews Service 3 East Bound Freight helpers One for Klamath	Clear	E 3 Road Engine to service	Clear	Y	M	Klamath Waiting Cars waiting to be blocked into E Freight 3 (25 cars) Switch out Door CO., Gas Block Bunker Oil cars and Freight House for Local	E Freight 4 (25 cars) Waiting to enter yard
2	W Freight 2	W Freight 1	E 3 Road Engine to service W Freight 1 Shasta Dlt #9	W Freight 1	E 5 Road Eng & Klamath Road Eng to service in Dunsmuir	E Local Hldg	Y	M	E F4 (25 cars), E 4 Hlpr Rtns to Gerber E F3 and E F4 split into E 5a and E 5b E 5c	E F3 Helper Returns to Gerber on main at Sims
3	W Freight 2	Clear	E 4 Road Engine and Klamath RE service Shasta Daylight #9 5 Minute Stop	W Freight 1	E 3 RE & Hlpr En #1 to E 5a	E Local Hldg	Y	M	Block E 5a and E 5b E 5c E 5a Departs	E F3 Helper Returns to Gerber on main at Sims
4	W Freight 2	Clear		Shasta #9	Clear				W Freight 1 Arrives Start Re-block for W 5	
5	W Freight 2	Clear	W Freight 1	Clear	E 4 RE & Hlpr En #2 to E 5b Klamath RE and Hlpr Eng #3	E Local Hldg	Y	M	E 5a Departs Cont Blk E 5b E 5c Shasta Daylight #9 on Main	E F3 Helper Returns to Gerber on main at Sims
6	W Freight 2 Departs	Clear	E 5a	Clear	E Local Oil to Bunker Tank& Frt Hs	E Local Hldg	Y	M	Klamath RE and Hlpr #3 Eng	Shasta Daylight #9 on Sims Main EOT E F3 Helper Returns to Gerber

COLUSA SP SHASTA DIVISION OPERATIONS PLAN



DUNSMUIR LOCAL and YARD SWITCHING

OP SESSION NO. _____ DATE _____ DISPATCHER _____

ENGINEER	BRAKEMAN	CONDUCTOR	TRAIN TYPE	#	START	END
E	B	C	DUNSMUIR FREIGHT STORES	LOCAL SW 1	1:56 PM	2:45 PM

1. Request Head End Power from North Yard Ready Track– Use River track.
2. Pick up 4, 40 ft from the loaded track # xx. Deliver to Stores track in North yard.
3. Record Car Data on switch list from
4. Pick up 4, 40 box cars – empty – record car data on switch list from and return to “Empty” yard track no. EE
5. Record Empty Car Data on Switch List form
6. Deliver SW lists to South yard master- Dispatcher
7. Return Head End Power (HEP) to North Yard (NYD) Engine Service – Use River track.

A fast clock on the NCE throttles was used to some extent.

You can follow Step 1 on these three documents. The bottom document is Step 1 Local and Yard Switching.

DISPATCHERS RECORD OF TRAIN MOVEMENTS					Date	CSD FORM 203201
EMPLOYEES ON DUTY		Time on Duty	Off Duty	Transfer of Unfinished Business – Orders on Table		Weather
NORTH OR EAST (read down)				SOUTH OR WEST (read up)		
				Train Number		
				Engine Number		
				Conductor/Engineer		
				Number of Cars Out		
				Drop/Pickup Cars		
				Drop/Pickup Cars		
				"Off Sheet" Run Complete		
				Mile Post	STATIONS	Stn No Siding Cap
				213.8	TO-R Gerber	GBR 200
				223.4	Red Bluff	RB 35
				258.2	Redding	RDG 15
					Sims	SIM 28
				321.2	R Dunsmuir Yard	DNY 360
				322.1	TO-R Dunsmuir	DNS 100
				326.1	Small	SML 38
				331.4	Mott	MOT 50
				333.5	Azalea	AZ 50
				336.7	Mount Shasta	MTS 22
				329.1	Upton	0
				342.0	Deetz	0
				345.1	TO Black Butte	BB 50
				368.5	Grass Lake	GLK 61.D
				428.7	TO-R K - Falls Yd	KFY 100
				429.5	R Klamath Falls	KF 10
					"Off Sheet" Run Complete	

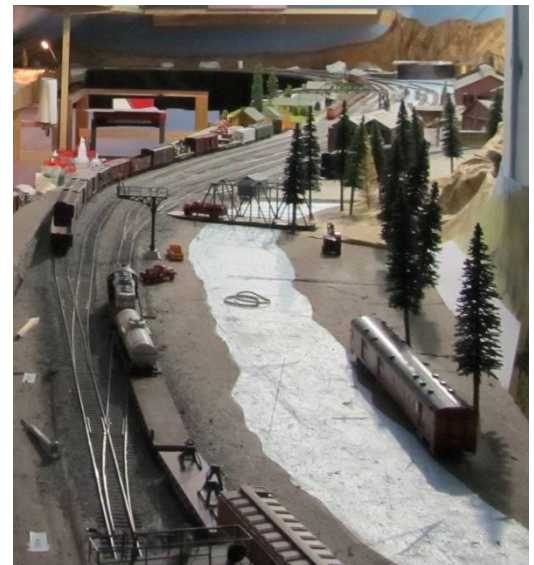
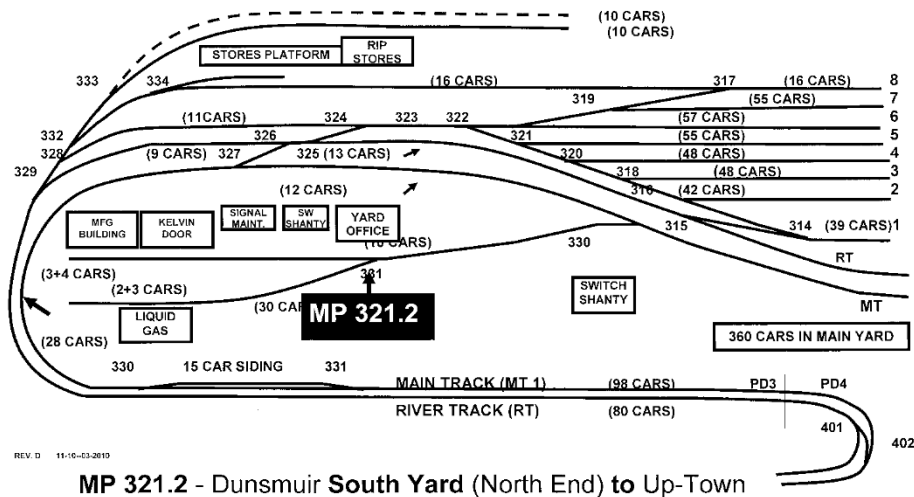
Rule S-72, Exception, No. 10 is superior to No. 377. Rule 86 B, West extra trains originating K-Falls Yard are not required to clear Timetable Schedule Time of No. 377 between K-Falls yard and Dorris.

Rule S-72, No. 12 is superior to No. 377; no. 10 is superior to No. 19

Note: 1) All train and engines under the control of the dispatcher must be logged "On Sheet" at the time of such control commences and "Off Sheet" at the time such control terminates.

2) Number of cars must be increased for any cars picked up while on the road.

02-03-2011



Left: 3-D mockup

Above: Entering Dunsmuir yard along the Sacramento River. (Two photos courtesy of Wouter de Weerd.)

Helping with construction and car readiness were Harley Worthington, Tom Baird, Darrol Wilson, Don Warmuth, Mike Andrews, Bob Luna, Mike Ferraiuolo, Brian Zine, and Carolyn Schedler.

Hopefully there are some planning ideas that you can use on your layout. Call Walt to become part of the team.

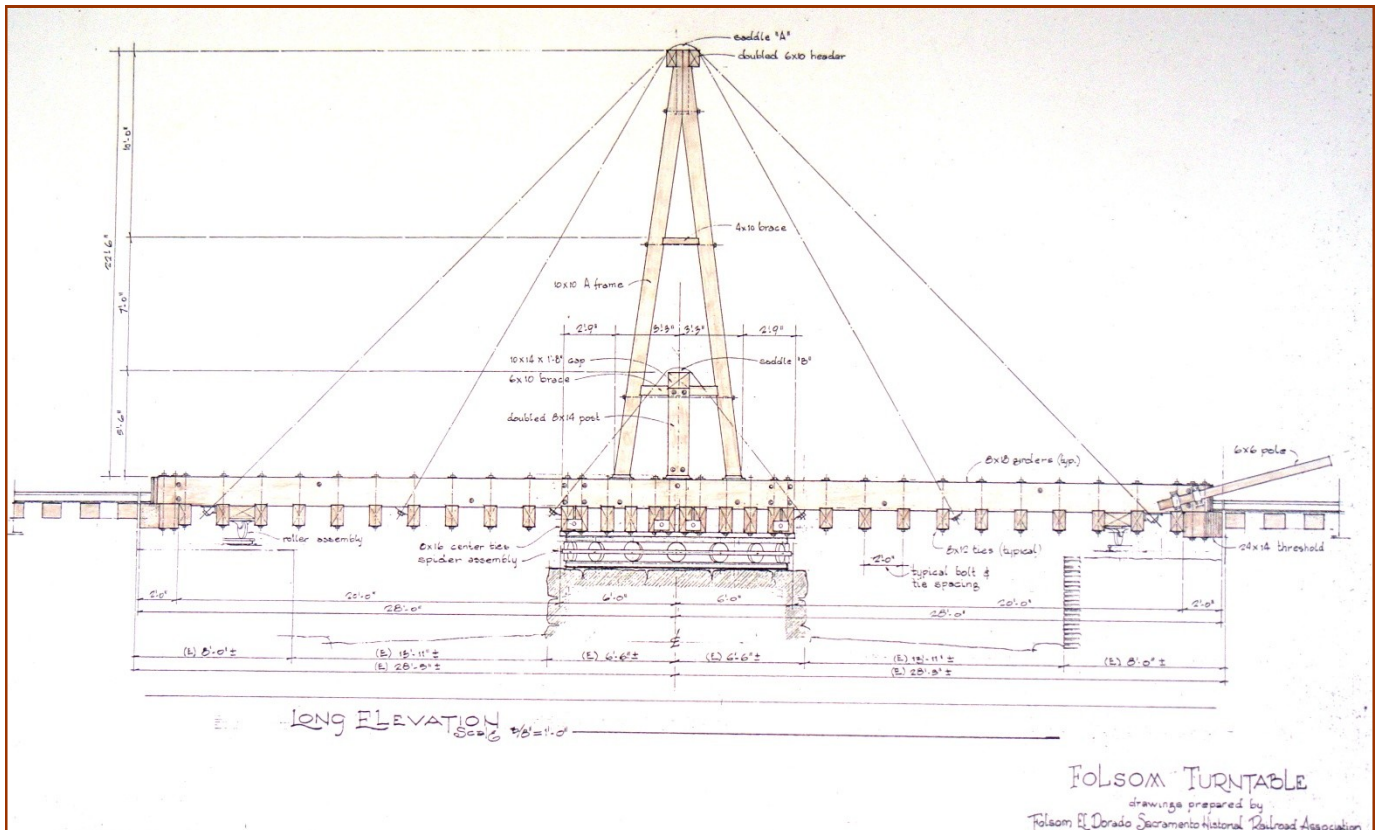
Folsom Railroad Museum

contributed by Gary Ray

The Folsom Railroad Museum and surrounding area is a great family place to visit. The museum itself has a box-car, caboose, and a Pullman car that is filled with railroad artifacts, documents, maps, drawings and rare photographs. The Railroad Museum is open from 11:00 a.m. to 4:00 p.m. on Saturdays and Sundays at 198 Wool Street, Folsom, CA. More information can be found at <http://www.fedshra.org/index.html>

Right next door is the Folsom Pioneer Village which has blacksmithing, gold panning, depot, settler's cabin, carriage shed, machines and equipment. They are open Thursdays through Sundays for the same hours (weather and volunteers permitting). The day I was there admission was free, but their web site says there is an admission charge. For information go to: <http://www.folsomhistorymuseum.org/pioneervillage.htm>

There are many shops and restaurants in Historic Old Folsom for the entire family to enjoy. (Unfortunately, as this went to press, I was notified that the Railroad Museum will be closed indefinitely due to construction on the Railroad Block Project.)





Railroad Museum

Open weekends
11:00am to 4:00pm
198 Wool Street
Folsom, CA USA
(916) 985-6031

Museum Volunteers
Don & Faye Palmer
Bill & Sharron Anderson

**Closed after
March 27**



Folsom Railroad Block Turntable

by Wendell Huffman

Reprinted with permission of Pacific Coast Chapter-Railway & Locomotive Historical Society

Originally written for the society's publication "Western Railroader" © 1995

The article that follows, and the supporting research, was borne in the 1980's out of the author's interest in the Sacramento Valley Railroad. Wendell was later sought to provide input and act as a juror in the design competition for the restoration of the Folsom Turntable and railroad block. Wendell is a member of the FED-SHRA and a librarian at the Carson City Library. The photos show the reconstruction of the 1867 Gallows style turntable on the original granite base at it's original location.



1856-1867 Turntable

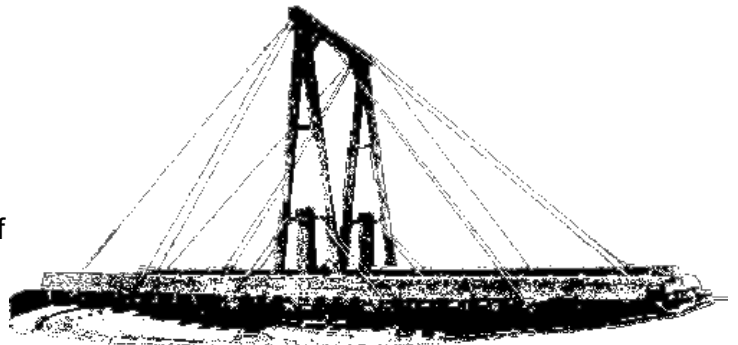
The first of several turntables to be used at Folsom, California, between 1856 and 1913 was one of two delivered to the Sacramento Valley Railroad via Cape Horn on the clipper Dashing Wave in June 1855. Because construction of the railroad itself took precedence, the task of assembling the knocked-down turntables did not begin until December of that year. Both were assembled at the company's shops at the Foot of R Street in Sacramento, and the Folsom turntable was conveyed to the line's eastern terminus soon after the rails reached that point. The turntable was installed at Folsom on 16 February and was first used to turn a locomotive four days later. While the Sacramento turn-

table was actually ready for service three weeks earlier, it appears from contemporary sources that no SVRR locomotive was turned until the Folsom turntable was first used.

The first SVRR turntables were of the deck type with the railroad track laid on the top "deck" of the turntable bridge (hence the name of this style). The turntable itself consisted of a forth-foot wooden truss bridge pivoted on an eight-inch disc-type center bearing. The

weight of this swing bridge was supported on six conical wheels—two at each end, while two more wheels were apparently located at the ends of a lateral beam which stabilized and centered the rotating structure. These wheels rolled on a flat cast iron circle rail laid around the perimeter of the turntable pit.

Much of this description of the first SVRR turntables is based on an account in Holley's Railroad Advocate of 7 February 1857. This report indicates that these turntables were turned by means of the "common gear at the side"; however, what is meant by this is unclear. While some early turntables were indeed operated by a geared hand-crank, most early turntables were pushed around by brute strength. What is certain is that turntables which were



supported on end wheels—such as the SVRR's first turntables—were difficult to operate. A contemporary note in the Folsom Telegraph indicates four or five men were required to turn the first Folsom turntable.

A preliminary excavation of the Folsom turntable site conducted by PAR Environmental Services, Inc., in April 1995 revealed that the original turntable pit had an inside clear diameter of forty-feet ten-inches and was approximately six feet deep. The brick pit retaining wall was seventeen inches thick. Several pieces of the granite foundation for the turntable's iron circle rail were found still in place.

Folsom's first turntable was provided with a grade-level wooden deck which rotated with the turntable and covered the entire pit. Such turntable covers were once fairly common and, like the covering on wooden bridges, protected turntables from the elements. However, as the Central Pacific's first Sacramento turntable (installed in early 1864) is known to have been provided with a covering specifically to prevent people, animals, and vehicles from falling into its pit, it seems likely that Folsom's turntable with its six-foot deep pit was also covered as a safety precaution due to its location immediately adjacent to the busy station plaza.

A surprising feature disclosed by the 1995 excavation of the turntable site is a brick-lined trench extending about eight feet away from the 1856 pit. The function of this trench was apparently to provide workers access under the cover to the turntable mechanism. This trench was apparently covered adjacent to the turntable and extended as far as it did to provide an uninterrupted walkway around the turntable's edge.

1867 – 1882 Turntable (Currently reconstructed)

Folsom's original turntable was replaced late in 1867. In contrast to the first turntable—which required several men to operate—the new turntable could be turned by a single man, according to the Telegraph of 14 December, 1867. This report is significant as it suggests that the new turntable was of the center-bearing style then coming into vogue. As the center-bearing design concentrated all resistance to rotation at or near the pivot—where the greatest leverage could be applied—center-bearing turntables were far easier to operate than end-bearing turntables. While late model center-bearing turntables were sometimes equipped with a perimeter circle rail, this served only to support the ends of the turntable bridge while locomotives entered or left the table and to prevent the turntable from being upset should it come out of balance during operation.

Center-bearing turntables could be of either the deck or through design (in which the track runs "through" the bridge structure). However, in either case, center-bearing turntables had to be longer than end-bearing to handle identical locomotives since the center-bearing design required enough room to allow a locomotive and tender's combined center-of-gravity to be positioned directly over the turntable's center (which an end-bearing turntable had only to be slightly longer than a locomotive and tender's wheelbase). Thus, if the second Folsom turntable was indeed of the center-bearing design, then it was most likely longer than its predecessor. Since only the top few feet of the original turntable pit retaining wall were ever demolished, a longer replacement turntable at Folsom must have been of the through pattern, with most of the longer turntable's structure located above grade and extending out over the remains of the old pit wall.

Indeed, the second Folsom turntable was most likely a wooden "A-frame" or "gallows" turntable. Such turntables were essentially center bearing, with all their



load supported on a small circle rail laid on a center foundation. The gallows design required only a shallow pit, and the installation of a gallows turntable longer than the original Folsom turntable would have required only the removal of the top few courses of the old pit's retaining wall.

An additional reason to believe that the 1867 Folsom turntable was of the gallows design is the fact that the SVRR was closely associated with the Central Pacific by that date (being owned by the CP's principal directors), and the CP was then using gallows turntables exclusively. If the SVRR followed the CP's practice, then the new turntable was probably identical to the fifty-one foot gallows turntable installed at Rocklin, California just six months earlier.

Just one year after the second Folsom turntable was built in 1867, yet another turntable was installed at Folsom near the SVRR carpenter shop. A subsequent newspaper report that a roundhouse was to be built near the "main" turntable confirms that this new turntable was indeed a distinct facility, and that at least for a time—Folsom had two turntables at once. It is hoped that future excavations will disclose the exact location and size of this second turntable installation.

1882-1891 Turntable



In July 1882, Folsom's 1867 turntable was replaced after fifteen years of service. While a newspaper reference to this new turntable's "derrick" assures us that it was of the gallows design, there is no definitive evidence relating to this turntable's size. While the CP's Sacramento turntable at the time was fifty-six feet long, fifty-one foot turntables were still quite common on the CP. Indeed, if their scale and accuracy can be relied on, Sanborn fire insurance maps indicate turntables closer to fifty-one feet than fifty-six feet for both Folsom and Placerville as late as 1890.

Fifty-one foot turntables would have sufficed as only light locomotives built in the late 1860's were then being used on the railroad to Folsom.

The fact that the 1882 Folsom turntable lasted only nine years further suggest that this turntable was only fifty-one feet long. It may have lasted such a relatively short time precisely because its limited capacity became a handicap with the introduction of larger locomotives on the CP-SP during the late 1880's.

1891-1910 Turntable(s)

In October 1891 yet another turntable was built at Folsom, perceived by the Telegraph as a decided improvement over its predecessor. A photograph from this period showing the new turntable almost hidden in the shadows of encroaching eucalyptus trees reveals enough detail to identify it as a SP standard "Number 3" turntable. It appears on a 1901 Folsom station plat with a diameter of fifty-six feet—a dimension which conforms exactly with one of the pit retaining walls unearthed in the 1995 excavation.

According to the local paper, the Folsom turntable was "reconstructed" in November 1908. Whether this is counted as a new or rebuilt turntable, it was apparently still a fifty-six footer as station plats through early 1910 show no change in the size of the Folsom turntable. However, just eighteen months after the 1908 rebuilding, Folsom's fifty-six foot turntable was found to be too short.

1910-1913 Turntable

Concurrent with the introduction of the SP's new seventy foot McKean motor cars to the Folsom-Placerville branch, the Folsom turntable was lengthened in May 1910 to accommodate the new equipment. The only physical evidence yet found relating to the 1910 enlargement is the apparent fact that the upper courses of the fifty-six foot pit wall were uniformly removed to the same level as the old forty-foot pit wall. This indicates that the fifty-six foot was deliberately lowered to allow a longer turntable to clear. It also indicates that the 1910 turntable required it no deeper than the previous gallows turntables and was, therefore, apparently still of the gallows design. While wooden gallows turntables longer than fifty-six feet are otherwise unknown in the extant SP records, the Folsom turntable appeared on a 1913 station plat as sixty-six feet in diameter.

Folsom's last turntable remained in service a mere three years and was replaced in March 1913 with a wye track constructed just west of Folsom at the Placerville switch. Immediately upon completion of the wye, the Folsom turntable was dismantled.

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Happy modeling,

Gary E. Ray