



The Hotbox newsletter provides historic information on Carter Bros. Builders of Newark, CA; the South Pacific Coast Railroad, and other regional narrow gauge railroads; as well as updates for our members, volunteers, and the general public about our special events, activities, and volunteer opportunities at The Railroad Museum at Ardenwood. The museum is operated by the Society for the Preservation of Carter Railroad Resources (SPCRR). If you have any questions or comments, you can reach a staff member by email at info@spcrr.org or call 510-508-8826.

The Museum's mission is the preservation, restoration and interpretation of regional narrow gauge railroad history, including Carter Brothers—a pioneer railroad car builder in California. We are located at Ardenwood Historic Farm, 34600 Ardenwood Blvd, Fremont, CA. We are a 501(c)(3) nonprofit and all donations are tax deductible. Donations are greatly appreciated through our website or by mail (SPCRR, PO Box 783, Newark, CA 94560).

Trains operate on Thursday, Friday, Sunday and holidays between April & mid-November. See our Calendar on the last page for our current schedule and special events. To make a donation, become a member, or for more information please go to our website www.spcrr.org. Newsletters are distributed six times a year. We also have more information on our events at www.facebook.com/spcrrmuseum.

A Long Time Ago...

BETTERAVIA, where we obtained the rail to begin our railroad

Don Marenzi, General Manager and Curator

Photos by the author unless otherwise noted

Here are my memories of the Betteravia cattle feed lot railroad and SPCRR's part of the rail story along with some other early SPCRR recollections. This will tend to ramble but I hope to convey the feel and how some of the SPCRR and the railroad at Ardenwood came to be from my perspective. Please realize that many others were doing important things for SPCRR that I wasn't directly involved in at the time so I cannot comment on that. Perhaps they can tell their parts of this story in the future. Hopefully this will convey some of the connections, close calls, friendships, and, yes, luck that got the SPCRR's grass roots effort at building a railroad started. I apologize in advance for any errors in my memory or if I have inadvertently left anyone out or miscredited them... this happened 39 years ago! *continued on page 2*



Two Plymouths and a feed car

The Discovery - A narrow gauge railroad to feed cattle

The first time I heard of the railroad at the Betteravia cattle feed lot was during the fall of 1972. I was a freshman at Cal Poly in San Luis Obispo and my roommate was an agricultural major from Willows, CA. Aware that I was a train buff, one afternoon he said to me "One of my classes had a field trip to a cattle feeding operation in Betteravia today. They've got a narrow gauge train to feed the cattle. It runs through the whole feed lot. We got to ride a cable car through the lot. They use it to show the prospective cattle buyers the stock in the pens." My first thought upon hearing this was "What did you smoke for lunch today?" which was appropriate for him. Okay, sure... if you say so...

Betteravia was a small town located west of Santa Maria. It was the site of a large Union Sugar Company sugar beet processing mill that started in 1899 and was served by the standard gauge shortline Santa Maria Valley Railroad. In earlier times, a branch of the 3-foot gauge Pacific Coast Railway also reached Betteravia to bring sugar beets to the mill. I had information about those but there was no mention of a cattle feed railroad. Later that fall I made a trip to Betteravia. Even if my roommate's "fantasy" railroad didn't exist I would be able to photograph the Santa Maria Valley Railroad which I hadn't visited yet, so the trip wouldn't be a total loss. I was later to learn that feed lots were often located near sugar refining plants because a waste product of the sugar refining process called silage or beet pulp was used to add roughage to the cattle feed.

Arriving at Betteravia it was easy to find the cattle feed lot (just follow the smell). And sure enough there were narrow gauge (42" gauge) tracks with small Plymouth locomotives and a few cars! I started taking photographs and was fascinated by the unique character of this virtually unknown industrial

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Two Plymouths at the feed loader



Cattle feeding from the troughs.

A Long Time Ago - Betteravia, continued from page 2

railroad. The employees were friendly and I admit that I was hesitant to ask about the cable car. I said very tentatively, "I heard you have a cable car to take buyers around the lot." To which the worker said, "Oh, yeah, it's in that shed. Let me get the key and I'll show you." Which he did, and there it was! A real San Francisco cable car equipped with a gasoline motor and living in its own shed.



Cable Car 42 built by the W.L. Holman Co.

It was the pride of the feed lot's owner Mr. H. Stanley Brown. The car was #42, a 1906 product of San Francisco's W.L. Holman Company (the builder of SPCRR's Diamond & Caldor Railway flat car 64). Cable Car 42 is now back in San Francisco, restored as a cable car and used only on special occasions.

The three small Plymouth locomotives that were still operating had been totally rebuilt above the frames with International Harvester tractor motors and parts. Two of these Plymouths would pull one or two large, eight-wheeled feed cars that would dispense the feed into troughs that went to the pens located along each side of the tracks. The hungry cattle would stick their heads through the corral fencing to eat. Describing this sounds like a tall tale so please check out the photographs showing proof of this! A few four-wheeled flat cars and one dump car made up the rest of the rolling stock in the 1970s.

Most of the cars rode on trucks that had been obtained from the Los Angeles Railway. The LARy had operated 42-inch gauge streetcars in downtown Los Angeles until they were replaced by buses. When the early LARy cars were scrapped, the feed lot bought the trucks to use under their feed cars.

I visited and photographed the cattle feed railroad a number of times during the 1970s. It became my favorite industrial railroad and it was narrow gauge too! They ran trains at least twice during the day (they did not run at night) depending on how many cattle were in the pens. Everything on this railroad was secondhand, custom built, or highly modified. As an industrial operation it didn't have to follow

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Flat car built on a Los Angeles Railway trolley truck



Feeding time

regular railroad rules and procedures. It really did look and operate like something out of a third world country—very fascinating and “a step back in time” in many ways. Later I even had the chance to interview Mr. Brown after he retired. I was able to find out more about the railroad, the cattle feed operation, and its history.

SPCRR

When I moved to the Bay Area in 1980, I was aware of “a group in Newark with the SPC caboose 47 car body.” So I went to a meeting at City of Newark Councilmember Shirley Sisk’s condo in 1981 where I first met Bruce MacGregor. After the meeting we went to McDonald’s for coffee and talked about Carter cars, former railroad cars used as chicken coops, narrow gauge, etc. I knew of Bruce and I

had his South Pacific Coast books. As I recall, he told me about the Diamond & Caldor flat car 64 and that they were going to recover the trucks from the flat car to put under caboose 47 after it was restored and display it at “a park.”

A few months later I took a class about the Central Pacific Railroad that Bruce was teaching at DeAnza College in the spring of 1982. John Stutz (who I knew as a White Pass fan and model railroader) told me about the class. At one of the classes Bruce remembered me from the SPCRR meeting, and told me that the D&C flat car recovery was going to occur... was I interested in helping? I answered, “Yes, and I have



SPC caboose 47 stored in the Patterson barn.

Photo: Bruce MacGregor

another model railroad friend, Brook Rother, that might be interested too. He has a lot of mechanical knowledge, tools, etc. that might be useful.” So I put Bruce and Brook in touch with each other.

Over the Fourth of July weekend in 1982 we recovered D&C 64 from near Placerville. Moving the entire car (not just the trucks and some parts) was Brook’s idea as I recall. Given where the car was located, that seemed unlikely to most of us but we were able to pull it off. The recovery of D&C flat car 64 is yet another story in SPCRR’s history. (*Editor Note: the story about recovering D&C 64 will appear in a future issue of The Hotbox.*)

When I lived in San Luis Obispo, I had researched the history and remnants (including many car bodies) of the abandoned narrow gauge Pacific Coast Railway that had run locally. A small group of PCRRy fans had organized a yearly meeting, calling ourselves “The Friends of the Pacific Coast Railway.” Two weeks after the D&C flat car 64 recovery, our PCRRy meet for 1982 was held on the July 17-18 weekend. Another narrow gauge model railroad friend, John Carroll, travelled with me to San Luis Obispo after work on Friday the July 16. The meet didn’t start until 1 p.m. on Saturday, so to occupy the morning I asked John if he wanted to see a real operating narrow gauge railroad. Of course he said yes, so off to nearby Betteravia we went. If John had not accompanied me on that trip, I doubt that I would have gone to Betteravia that day. After all, that feed lot railroad would always be there...

Arriving at the feed lot we found the railroad looking normal. We started taking pictures and soon were approached by the lot’s manager who we chatted with. When I asked what time the train would be running, his response was that it wasn’t because the cattle feed lot was out of business. He was the

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receiver of the operation and the lot was to be closed and dismantled. He said, "Are you some of those train fans? Do you know of anyone who might want to buy these trains, rail, etc.?" Well, no we didn't, but I took his card and took even more photos since sadly this would be my last visit to the railroad... or so I thought.

I mentioned this experience to Brook later that week while at Jo Johansen's On3 model railroad layout in Daly City. Brook and I were both part of the regular crew there along with Rich Nealson, John Carroll and John Stutz. I mentioned, "We salvaged a flat car; do you wanna rip up a whole narrow gauge railroad?" Brook seemed real interested and persistent about it. I couldn't understand why...

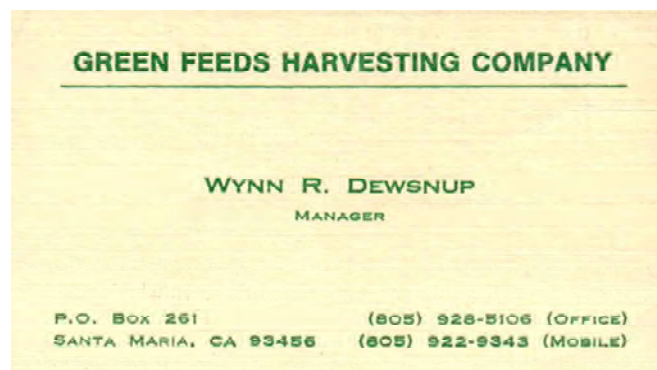
I really thought he was joking with me! Finally I said, "what for?" And he said, "the park." And I said, "what park?" Famous last words!!!

Up to this point I had not heard there was any plan other than to restore caboose 47 (and maybe flat car 64 also) as static displays. I didn't know where they would go, and Ardenwood as a park was still a development that I had not heard about. And certainly not build a real operating narrow gauge railroad! What would we use as a locomotive??? Hmmm...

Apparently after the D&C 64 recovery, Brook attended a SPCRR meeting with Bruce where the idea of building a horse-powered railroad based on the SPC Centerville branch was discussed. So Brook told Bruce about the rail at Betteravia possibly being available. Soon thereafter Brook and I went down to Betteravia and met with the receiver, Wynn Dewsnup, to see if we could obtain some of the rail and maybe other parts for our railroad in the new park. After that meeting Shirley Sisk negotiated the purchase of the rail, which we had to rip up.



Need a bigger hammer. Volunteers (left to right): Bruce MacGregor, Rich Nealson, Brook Rother, Charlie Maybe.



Bruce was very key in financing the purchase by selling half of the rail to the new V&T Museum in Carson City through his friendship with Virginia & Truckee Museum Curator Dick Datin (who was also the person who discovered our SPC caboose 47). As I recall, we paid about \$15,000 for the rail, and Bruce was able to sell half of the rail to Carson City for \$14,000 (a very good price)—and we did not have much more than the \$1,000 difference in the SPCRR treasury! Metal scrap prices were very low at that time, and I had priced out rail from a couple of used rail and metal brokers for a comparable amount of used rail. I found out that SPCRR's half of the Betteravia rail would have cost about \$80,000 at that time! If we had bought the rail from regular dealers, would SPCRR have been able to come up with the money? So we got a great price on the rail, but we had to put in the labor to remove it. SPCRR's volunteers were soon to learn where the term "sweat equity" came from.

This was a win/win for the V&T Museum and SPCRR! Even better for SPCRR, some years later the V&T Museum (now the Nevada State RR Museum) sold the rail back to SPCRR. A short time after

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It worked much better to lift the rail then hammer the ties off. Volunteers: Bill Barbour, Rich Neilson, Bruce MacGregor (left to right)



Dragging rail to loading area. Volunteer: Brook Rother



Loading rail and parts on truck. Volunteer: Brook Rother on left

they received the Betteravia rail, Carson City received a rail donation from the Union Pacific. The UP rail was newer and heavier which made it perfect for their operation. The timing of UP's donation to the V&T Museum really worked in SPCRR's favor. The older, lighter Betteravia rail was sold back to SPCRR at the original cost plus shipping paid by the V&T Museum. Scrap and rail prices had risen considerably by this time so this was an incredible deal for SPCRR. Also, originally the best rail from Betteravia went to Carson City, and now that rail was returned to SPCRR (some of this rail was used east of Deer Park).

Mr. Dewsnup had told me that another potential rail buyer was country music star Merle Haggard. Mr. Haggard had a ranch near Redding and he was a train buff. At that time, he was considering building a private railroad on his ranch. Turns out that Merle's father was a Santa Fe employee, and Merle even had his tour bus painted in Santa Fe's attractive "Warbonnet" paint scheme. (In 2003 Merle Haggard helped the Smithsonian dedicate its railroad and transportation exhibit.) Assuming that his monetary reserves were far better than SPCRR's, I'm certainly glad Merle didn't purchase the Betteravia rail to build his own railroad!

By the time SPCRR's deal to purchase the Betteravia rail was completed it was mid-October and we had to rip up a lot of the track in the rain. It wasn't very much fun dismantling a railroad that I had really liked, and the weather we encountered while doing it did not help. It was very muddy, hard work for all of our volunteers—especially with the constant strong odor of an old cattle feed yard plus the fumes from the adjacent sugar beet plant dominating our senses. Most of us slept on the ground in sleeping bags or in our vehicles.

We did most of the work on weekends. One night a heavy rain storm hit in the middle of the night causing a scramble for cover. A number of sleeping bags ended up

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under the truck trailer, with many more people in cars or any other place where any type of cover could be found. I was sleeping in the back of my small Datsun pickup with a low shell until the storm hit, then three volunteers climbed in and I moved to sleep in the cab. Very tight quarters and not very restful! Only a few of us were smart enough to get a nearby motel room, and I wasn't one of them.

Ripping up the rail up was very hard work! The ties had wallowed into the muddy ground for years and the spikes felt like they were set in cement. Most of our crew were office "desk jockeys" not accustomed to physical labor. Pulling up each spike with a pry bar would have been an endless task for the crew we had available. Brook Rother and Rich Neelson determined an easier way—using a front end loader to lift one end of the rail with ties still attached out of the ground, then hammering the ties off with spike mauls. That worked well and very soon that method was enhanced by running a second tractor over the ties to pop them off the rail. No more pry bars and sledge hammers! The receiver was not happy since he had hoped to sell the ties for landscaping use, but when he really looked at the ties he realized that wouldn't have been possible because of their poor condition. A lot of those ties were originally bought secondhand from the Pacific Coast Railway.

HISTORY OF THE FEED LOT

The feed lot railroad started in about 1915 with the small cars being drawn by mules. It was gradually expanded little by little over time as the feed lot grew, and small gasoline locomotives were acquired in the late 1930s. The rails used at Betteravia came from many sources at various times, all of it secondhand. During my interview with Mr. Brown (the feed lot owner), he mentioned acquiring rails through a dealer in Los Angeles... some he obtained from a coal mine near San Miguel, and some came from the nearby Pacific Coast Railway as it was abandoned. Brook Rother added that he had worked with a truck driver during the 1970s who told him that he had driven two truckloads (maybe more) of 40 pound rail from the just abandoned Caspar South Fork and Eastern Railroad to the feed lot in Betteravia in 1946-47.

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Running over the ties as they lifted the rail was even faster



Scrapping almost done



After many weekends of work, it was finished

So some of our rail came from the CSF&E, and we are riding on some very historic rails. If only they could speak!

Because of the way the feed lot had expanded, most of the rails were a real mismatch which complicated relaying them at Ardenwood. Of course the way we had ripped them up, loaded, transported and unloaded them didn't help either. I recall more than one Sunday midnight unloading episode at Ardenwood with only automobile headlights lighting the scene. All of our tired crew were due at our real jobs early the next morning. We were to repeat those performances with rail and equipment from West Side and other places in later years. I recall that when we started to lay the rail at Ardenwood, we had to find pieces of rail that were of the same height to join, and then make custom joint bars with holes matching a given pair of rails. Lots of extra work measuring, sorting, and painting each end of each rail. I recall Bruce MacGregor did a lot of that work, John Stutz too. Then Brook would cut and drill the joint bars from strap or bar stock.

We were only able to open the railroad at Ardenwood Historic Farm in 1985 because of the Betteravia rail. The first half mile of track between Ardenwood station and Deer Park is all rail from Betteravia except for a small donation of rail by San Francisco Muni.

Like they say... timing is everything. There were a lot of what ifs and close call connections that fell into place for us that first year. Something mystical/divine/lucky/unexplainable happens when a group of people with a good intentions and a goal get together. That and a lot of beer and pizza! 🍷



With EBRPD, County, and Fremont dignitaries watching, SPCRR President Shirley Sisk sets the last spike (1985). Photo: Bruce MacGregor

In the May/June edition of *The Hotbox*, Jack Burgess will tell the story of what it took to survey, grade, lay the rail, and ballast the track in time for the Park's grand opening.

In the July/August edition of *The Hotbox*, Don Marenzi will tell us the story of the former operation at Betteravia including more about the cable car.

SPCRR and East Bay Regional Park District Approve 2021 Five-Year Agreement

Jack Burgess, Treasurer
Photo by author

Since 2015, SPCRR has been under a 5-year contract with East Bay Regional Park District (EBRPD) which specifies the payments to SPCRR for train operations on regular days, special events, etc. A revised Agreement was approved by EBRPD Board of Directors in February which covers years 2021-2025. Some of the changes from the prior agreement include:

- The new fee schedule provides funding for a 3-person crew for regular days, and a 4-person crew for special events and holidays. The prior agreement provided funding for a 2-person crew although SPCRR covered the cost of a 3-person crew for some of the days during that time.
- Since 2016 our equipment and track must be certified by the State of California Permanent Amusement Ride (PAR) division of OSHA. EBRPD has reimbursed SPCRR for our inspection costs although it was not in the prior agreement. The new agreement covers full reimbursement of all PAR costs by EBRPD.

- The new agreement specifies payment for train operation on all holidays and two special events, as well as payment of SPCRR's actual costs for additional special events. The old agreement did not include payment for these events.

- In past years SPCRR has put on Rail Fair each Labor Day weekend and received 50% of the ticket sales. The new agreement increases SPCRR's percentage to 75% of the ticket sales. The previous agreement also required



Railroad Adventure Day 2016

- that we operate a steam locomotive during Rail Fair, which has now been deleted. We must now operate under PAR rules which requires that any locomotive pulling passengers on our track must have air brakes, be certified by a private licensed mechanical engineer, and then certified by the State. Most owners of historic locomotives do not want to modify their engines and go to the expense of getting PAR certification, therefore we cannot guarantee that we will have visiting locomotives at Rail Fair in the future.
- The requirement for SPCRR to have four Railroad Adventure Days (RADs) per season was deleted in the new agreement (the RADs did not cover our operation costs). Instead SPCRR has agreed to a new interpretive program requirement to provide seven public presentations, and one virtual tour of 5 minutes long, per season. These will be done with volunteers and we are currently working on some fun ideas that the visitors will enjoy. 🚂

Editor's Note: After reading the clipping that John provided for this issue of *The Hotbox* (see below), I asked him if this meant that the 0-4-0 Ann Marie would have been called a "4". John answered, "At that time the Ann Marie could have been described as either since this approach to describing locomotives had just been proposed and there was no consensus." John went on to provide this fascinating history on locomotive classifications.

The History of Locomotive Classifications

John Stutz, Director-at-Large

While it may seem absurd to us now, in 1900 it was not industry practice to make explicit reference to wheel types and counts. Names like "eight wheel," "mogul," "ten wheel," and "consolidation" had sufficed for so long because those types covered the vast majority. In fact mere cylinder bores (the nominal piston diameter) had been used for decades when 4-4-0s comprised the vast majority of locomotives used.

But by 1900 conventional firebox design—with the box above the frames but still between the drivers—had been pushed beyond its effective limits for both large freight and fast passenger engines. Wootten's very wide and shallow firebox—devised to keep $-3/32$ " anthracite breaker waste on the grate—was the only proven alternative, but it was proving too big for ordinary bituminous coals. The solution would be the moderately long, wide, and deep firebox located behind the drivers and supported by a trailing truck, however both builders and purchasers were remarkably adverse to the introduction of additional axles. Baldwin Locomotive Works had done just that in 1897 for the then private Japan Railway's 3'6" gauge 4-4-2s and 2-8-2s, but it appears that no one outside of Baldwin's export department was aware of this innovation!

Despite the extra axle inhibition, late 1890s standard gauge fast passenger locomotive designers were shifting away from the 4-4-0, initially to the 2-4-2 and a little later focusing on the more steady running 4-4-2; both types using a trailing axle rigidly mounted in the frame, under both narrow and Wootten fireboxes.

It was not until early 1900 that the Chicago, Burlington and Quincy Railroad made a breakthrough—introducing the moderately wide and deep (MWD) firebox on their new 2-6-2 "Prairie" and 0-6-0 switcher type locomotives. About midyear the Chicago and North Western Railroad applied the MWD firebox to a group of Atlantics with remarkable results. Only toward year's end did Brooks apply a radial trailing truck to the Burlington, Cedar Rapids & Northern Railroad's 4-4-2s. The first MWD firebox 4-6-2s were built for New Zealand Railway's 3'6" gauge in 1901, and was quickly adopted for U.S. passenger service.

THE CONFUSION OF TYPES.

A Logical Locomotive Classification Needed.

The past year has brought out a large number of different locomotive designs, and probably a greater variety than have ever appeared in a similar period, and there are more to come. It is desirable that each class should have a name representing its characteristics in some logical way which will correspond with the usual type designations which generally refer to the wheel arrangement. The number of "types" is increasing, and the nomenclature is tending toward confusion. The "ten-wheel" type is now likely to be confused with the "Atlantic," the "Northwestern," the "Chautauqua," the "Fan Tail," the "Consolidation" and others yet to come, which have ten wheels, unless some simple scheme of classification is devised. We also have the "Decapod" and the "Mastodon" and the "Twelve-Wheel" types. There are too many names, and the tendency is to give a type designation to a new design the only peculiarity of which is the outside or inside journals of the trailing wheels. Mr. F. M. Whyte, Mechanical Engineer of the New York Central, comes to the rescue with a suggestion which seems to meet the requirements in every way, and it is presented with a view of obtaining criticisms and suggestions. The plan is to designate the number of wheels in three groups; those in front of the drivers, the drivers themselves, and those in the rear of the drivers. An 8-wheel engine is a 4-4-0 (or a 4-4), a 10-wheel is 4-6-0 (or 4-6), an Atlantic type 4-4-2, a consolidation 2-8-0 (or a 2-8), the Prairie type 2-6-2. Any possible wheel arrangement may be covered by this simple classification. If such a classification is adopted the present confusion of type names may be overcome. If any of our readers can suggest a better plan we shall be glad to have it, with their criticisms on this one.

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The 2-8-2 was also widely adopted over the next decade, with the Denver & Rio Grand's class 125s forming one of the earliest large orders. And no one foresaw the Mallet revolution of post 1905.

The point of this rambling discourse is that at the end of 1900, U.S. standard gauge locomotive design was in a state of rising ferment, with, hopefully, improved types appearing every few months. And with each new variation the builders or purchasers were proposing a new designation, despite common wheel arrangements. So Whyte's proposal was very timely, promptly and widely adopted, and easily adapted to accommodate tender/tank differences and the yet unanticipated articulated variations. Now we simply take it for granted as the fundamental way to describe steam locomotives, but this news clipping shows where it began.

After the article appeared, the following letter to the editor was received from Mr. Whyte:

American Engineer and Railroad Journal, February 1901, p 55

LOGICAL LOCOMOTIVE CLASSIFICATION

To the Editor:

Lest there be some misunderstanding concerning the method of designating the types of locomotives as explained in the issue for December 1900 of the *American Engineer* please allow me to suggest as follows: Inasmuch as the maximum number of sets of wheels now used under locomotives and, as far as can be seen, the maximum that will be used for some time is three, then there should be used three figures to designate each type. It is not important whether the figures indicate the number of wheels or the number of axles in the respective sets, except that, inasmuch as the present designation of types is in some cases, on the basis of number of wheels, it would be well to have each figure indicate the number of wheels in a set.

There may be some question as to whether the first figure in the designation should indicate the number of wheels in the leading truck or in the trailing truck: a large number, probably a majority, of the railroads and locomotive builders show the right side of the locomotive in elevation drawings and in such cases the designation of type reading naturally from left to right would indicate the number of wheels in the elevation reading from right to left; it is suggested that there would be less confusion, however if the first figure in the designation be used to indicate the number of wheels in the forward set and the last figure the number in the rear set.

Therefore, with the above explanation, it is suggested that whether a type has one, two or three sets of wheels, three figures be used in the designation of it, the first figure representing the number of wheels in the leading truck; the present 8-wheel type would become a 4 4 0 type; the 10-wheel would be a 4 6 0 type; the mogul a 2 6 0 type; the "Prairie" type, a 2 6 2; the "Atlantic", "Northwestern", "Central Atlantic", and the "Chautauqua" would become one type, the 4 4 2 type. A 6-wheel switcher would be a 0 6 0; and a 4-wheel switcher a 0 4 0.

This would give some fixed basis for type designation and it must be acknowledged that the present method has no basis; the layman refers to all heavy locomotives as moguls, if he knows such a term is used, and in such use of the word he gives it the usual meaning, great power. Even those who are presumed to know the distinctions of the present type designations apply different meanings to the names "mastodon" and "decapod" and others, and frequently confusion results. No confusion could result from the suggested method and, because it has a logical basis, its use by anyone presupposes the knowledge of the basis; therefore errors in interpretation of it would be directly chargeable to the one making the error.

The present is a most favorable time to place on a satisfactory basis the designation of locomotive types and to this end a thorough discussion is desirable and that system which promises the best adopted at once. The method to be used in making a formal adoption of any new system is quite as important as to make a satisfactory choice of a basis of designation, and no method of adoption would be more certain and speedy than the immediate use of it, when decided upon, by the technical press; undoubtedly the stamp of approval by the Master Mechanics Association, and possibly the railway clubs, would tend to make it official as well. The terms now creeping in are good enough as localisms, but they will not prove satisfactory for general use.

F.M. Whyte
New York
Mechanical Engineer
N.Y.C. & H.R.R.R.



Track Talk...

Compromise Joint Bars

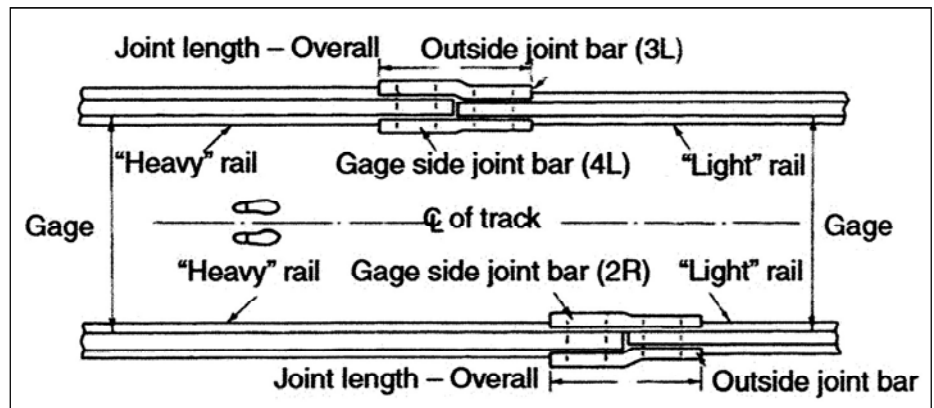
John Goldie, Track Manager

Photos by author

Our current railroad is mainly constructed with 40# and 45# rail. Our new track construction uses 50# rail. The “pocket” spur was built out of 25# rail. Usually a joint can be made between 40# and 45# rail since the difference in dimensions is slight, and a small modification to a standard joint bar can accommodate the connection within allowable tolerances. However when changing more than 10 pounds in rail weight the difference can exceed the allowable tolerances.

The two critical alignments are basically the gage side of the rail head (inside edge of the rail head), and the running surface (top of the rail head). To solve this problem specialty gauge bars—known as compromise joint bars—are used.

What is unique about these is that all four are different, the field side (or outside) has a jog or displacement in it to align the gage side of the rail heads. The bars also match the rail head top for a smooth running surface. The image shows the drawing of a Compromise Joint for reference from the Harmer Steel catalog.



Compromise Joint Bar applications – Courtesy of Harmer Steel



Image 1: Left Side Field (3L) and Gauge (4L)—commercial-built compromise joint bar set.



Image 2: SPCRR custom-built compromise joint. Note the gauge side and head alignment.



Image 3: Top down view showing the double bar on the 25# rail to align the gauge side.

There are a few suppliers available, but they tend to stock only a few of the more common and larger sizes of rail. The Harmer Steel image above shows a picture of commercial compromise bars for 85# to 100# rail. Note the 3L and 4L indicators. Also note the alternating round and oval holes to accommodate BOHN bolts in an alternating pattern, which is the standard practice on larger rail.

On narrow gauge rail it is also common to orientate the bolts with the nuts on the field side. This allows for the wheel flanges to not strike the nuts on the smaller rail. On our SPCRR rail it was also done to keep the gauge side clear of hazards when we used to operate our railroad with horses (*Image 1*).

On our railroad the smaller rail sizes presented a challenge. Previous SPCRR track crews used their engineering skills and custom-built compromise joints between the 40# siding rails and the 25# pocket rails (*Image 2*). We will also drill and add the missing bolt. Image 3 shows the top down view.

On the field side of the rail a double bar was used for displacement of the smaller rail. This implementation meets the need for a compromise joint by aligning the gauge and top surface for a smooth ride across the transition of rail sizes.

The following is a new series showcasing our members, volunteers and readers who have built models or layouts of the South Pacific Coast Railroad. If you would like to share a photo of a SPC model or layout that you have built, please contact the Editor at info@spcrr.org.

Modeling the South Pacific Coast Railroad “Santa Kruz” on the SPC

Steen Mortensen, SPCRR Life Member

Life Member Steen Mortensen moved to the U.S. from Denmark. Steen’s SPCRR inspiration began when he and his wife celebrated the end of his many years of medical training at the Loma Linda University Medical Center in California with a trip up the California coast in June 1977. (Steen is now retired as Chief of Rheumatology at Wichita Clinic, Ascension, Kansas). They began their trip at a National Model Railroad Association meet in Santa Barbara, where he found a copy of Bruce McGregor’s *South Pacific Coast* book and Steen says “I was trapped!”

Already working on a N-scale SP layout in a spare bedroom, he began dreaming of modeling the SPC with its combination of trains and businesses, and especially the differing landscapes. Steen finished the plan shown here when he had access to computerized drawing, using the (then new) 3rd Planit software.

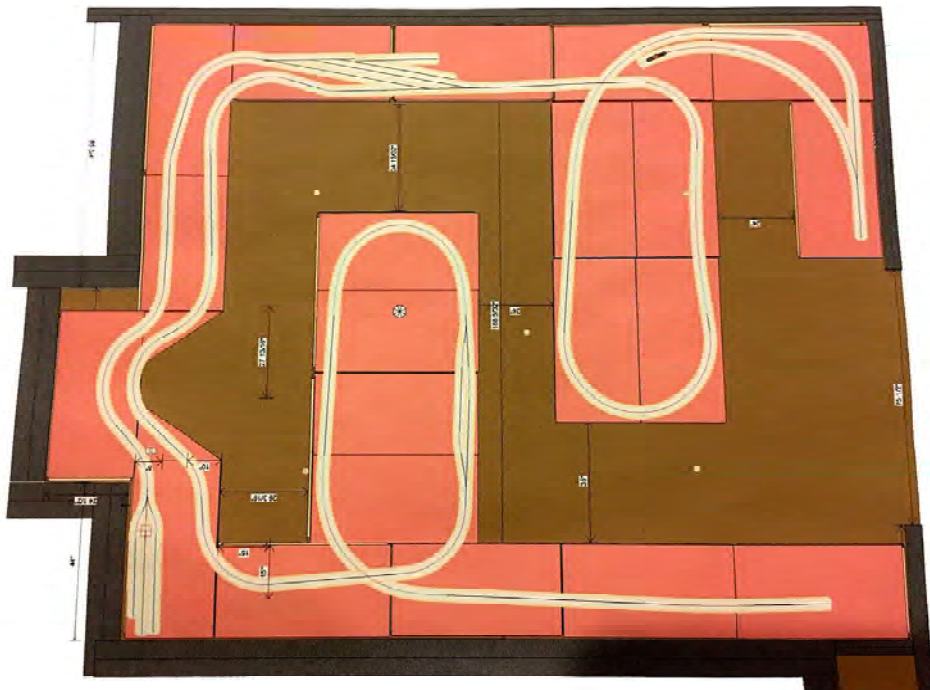
However their growing family meant that there was no longer space for the bedroom layout. Years later they moved to Kansas to pursue a new job and they purchased a house that had a basement. Finally he was able to begin his dream layout!

Using Bruce’s books as references, Steen is building a point-to-point HO_{N3} layout that is very close to his original plan. He has selected the time period when Carter Bros. was very active before SP took over and he wants to include the activity of the passenger trains traveling from Oakland, and possibly include ferry transport from San Francisco to allow for the weekend traffic heading to Santa Cruz (he calls his layout Santa Kruz). He also wants to include redwood lumber traffic from the mountains, and an option for agriculture products.

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The wharf at Santa Kruz



Layout Plan

Steen retired three years ago and has been spending an increasing amount of time on the layout—even more so this past year with Covid-19 threatening. Included here are photos of some of the structures and scenes he has modeled. The track is a mix of purchased and hand-laid in codes 40 and 55. Turnouts are scratchbuilt because he wants to include stub switches.

The mainline from end-to-end has been laid and he is now ready to begin on the track into the mountains using code 40 rail. He began detailing his layout from the starting module seen at the lower right corner of the plan. That is where the Santa Kruz wharf is located on the Pacific Ocean. The wharf was built with redwood cut to scale to duplicate the prototype. The water was modeled using toilet paper, glue, paint and many layers of gloss and white glue with a little white paint. He found the idea from a YouTube video of a man who runs Marklin of Sweden. (Steen says it is worth viewing for his other great ideas too (<https://www.youtube.com/channel/UCPeZXHh52SuCYjndtHg9sA>))



Prototype lighthouse



*3D designed and printed lighthouse
- still needs windows and doors*

The lighthouse is modeled after photos he found on the internet. He included a light for the lighthouse using a LED with electronics so that the light blinks slowly. The lighthouse will be installed at the back corner (above and behind the pier). The wharf plan was based on a Campbell kit, but




The engine house

instead Steen made it out of redwood lumber the same as the prototype. The wharf supports are made of round wooden poles cut and stained to fit (note the barnacles). The engine house was drawn and printed in 3D. He said that he drew up plans with a CM HOn3 engine house kit as the basis because “It looked so nice on the drawings and I felt it would work for me, but I wanted to make it myself. It looks similar to engine houses for this era.” (He may build one more engine house at the other end following a prototype SPC building.)

The 1910 station was 3D drawn and printed for a friend based on an AT&SF standard plan. It had to be printed in two parts due to the size limitation of Steen’s Prusa printer. The model shown is a test print of his friend’s depot which Steen is using as a temporary Santa Kruz depot until he draws up and prints a depot for his Santa Kruz layout based on a SPC station (the building behind is the engine house).



The station

Steen is currently working on redrawing the plan for a wire-holder with safety cap to be 3D printed that will be used to hold the 5 and 10 volt main power leads and wires that send out the DCC signal. He is also running the wiring for the lighthouse to connect to the new wire holder. 

DONATIONS - February/March 2021

Donations \$10-\$499

Bob Dike
Michael Flaherty
Ted Miles (*upgraded to Life Member*)
Richard Patchin
Amazon Smile (*thank you new Amazon Smile members*)



Material Donations

Peter Schulze - two spring-switch springs
John Houghton - new full-size generator for tool car; switch stand; large wrench set; tools (hoes, rake, etc); 10 gallons of diesel; 25-ft chain & hooks; Westinghouse air brake book set

HOW TO MAKE A DONATION

All donations to SPCRR are tax deductible! SPCRR is a 501(c)(3) nonprofit organization. You can donate on our website at www.spcrr.org and click on "**DONATE**" at the top of the page. You can use any major credit card and you do not need a PayPal account. If you prefer to mail a check, please send it to: SPCRR, PO Box 783, Newark, CA 94560. A donation acknowledgment letter will be sent to all donors for tax purposes.

Sign up for Amazon Smile to help our museum even more (and it's no cost to you)! See the last page of the newsletter for more information.

If you would like to donate in someone's honor or memory, please include that information with your donation. If you have any questions, please send an email to info@spcrr.org or call 510-508-8826.



Engineer Ron Quilici helping kids ring the bell. Photo by Barry Lependorf

April Fools!

The Bald Eagles have returned to Ardenwood to raise an eaglet for their second year! In honor of the Park's new mascot, we've come up with this awesome new paint scheme for Katie!



Welcome New Life Member!

Ted Miles San Francisco, CA

SPCRR greatly appreciates our members and volunteers and especially now. While COVID-19 has kept us from operating the train and special events, track construction projects are gearing up for spring and summer and we will soon begin car restoration workdays again. See the Weekly Workdays section in this newsletter to find out how you can participate. There are volunteer jobs for all abilities!

Dues for Contributing Members are just \$20 annually and are due no later than January 31 each year. Become a LIFE Member for a one-time donation of \$250 and you never need to pay dues again! Online renewals and new memberships are available for purchase through our website. You can also make a donation at the same time. To join SPCRR or renew your dues, visit www.spcrr.org/joining.htm. If you would prefer to mail in a check please make your check payable to "SPCRR" and mail to: SPCRR, PO Box 783, Newark, CA 94560.

All dues and donations are tax deductible. SPCRR's Treasurer will send a letter for tax purposes for all Life Member payments and for all donations. Contributing Members can use your PayPal receipt or cancelled check for tax purposes. SPCRR is a registered 501(c)(3) nonprofit corporation. If you need any information about your membership or on becoming a new member, feel free to contact me at membership@spcrr.org, or call 510-508-8826.

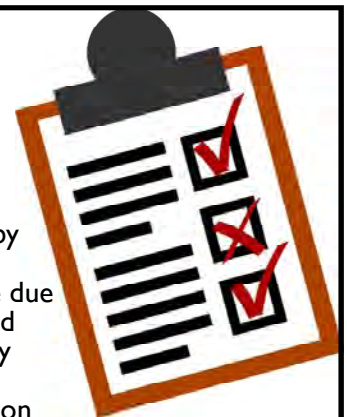
SPCRR Board of Directors Meeting Summary

January 9, 2021 (meeting held via Zoom)

- Approved appointment of Don Marenzi as General Manager and Curator, proposed by President Brook Rother.
- Treasurer Jack Burgess reported on our budget situation. As we have had no income due to the pandemic, things are tight. EBRPD is continuing to reimburse us for some fixed expenses, like liability insurance. We can move ahead with projects that are funded by donations.
- Jack also reported that EBRPD has approved our 2021-2025 funding proposal, based on three-person crews.
- Formed a committee consisting of Andrew Cary, Jack Burgess, Barry Lependorf and John Goldie to discuss manager roles and responsibilities, and propose candidates.

February 13, 2021 (meeting held via Zoom)

- Approved Bruce Sorel as Safety Officer, with Barry Lependorf and David Waterman as assistants, proposed by President Brook Rother.
- Treasurer Jack Burgess noted that EBRPD had approved a few more terms in our five-year contract: two or more paid special events per year (like Tartan Day), and an increase in our share of the gate for Railfair from 50% to 75%.
- General Manager Don Marenzi presented a proposal for a static display at Ardenwood Station while we are not operating due to the pandemic.
- Track Manager John Goldie reported that the park is upgrading the farm road to Deer Park, and the track crew will rebuild "Farmer's Crossing" in the eucalyptus grove.



Weekly Workdays Restoration, Track, Events & Miscellaneous

Ken Underhill

Date(s): Track work is usually held on Sundays and occasional weekdays

Time: Email or call the managers shown below

Meet At: Car Barn (for directions, see info on the last page)

Special Abilities or Work Equipment: N/A

What to Bring: Long pants, work gloves, water, and steel-toe boots (if you have them). Working outdoors you will need a hat, long-sleeve shirt, and sunscreen. We generally go off-site for lunch, but you are also welcome to bring your own lunch.

- GREAT NEWS - CAR RESTORATION begins again soon! For more information contact Don Marenzi at curator@spcrr.org or call 510-456-8840.

- TRACK WORKDAYS are still going strong! Get out of the house and join us for some fun (volunteers stay at least 6 feet apart). Contact Track Manager John Goldie (info below) to find out when the next workdays will be held.

PROGRESS SINCE THE LAST NEWSLETTER

CAR RESTORATION - Gene Arrillaga (email restoration-mgr@spcrr.org or call 510-690-4687)

Car restoration projects will begin again soon!

TRACK WORK - John Goldie (email mow-mgr@spcrr.org or call 408-784-1611)

January 2021 - Volunteers: B. Goldie (4 hrs), J. Goldie (4 hrs), J. Goldie (36 hrs), B. Lependorf (4 hrs), B. Sorel (30 hrs), D. Waterman (77 hrs). Due to the recent COVID order, there have been no scheduled track work days since mid-December. However we have been able to accomplish some individual work items and received some supplies: brush cutting along the mainline; tool maintenance, repair, & cleaning; 60# rail unloading, labeling, sorting, stacking; 40/45/50# rail unloading, labeling, sorting, stacking; installed the curved 40# closure rail: 12 bends, joints/bolts, spiking; turnout heel joint installation/point fitting; fabrication of bridal bars; 60' mainline ballasting/profile; 50' turnout ballasting/tamping/leveling; adjustments of stub switch profile/headblock height; downed limb/snag cleanup; removed excessive dirt piles; garbage clean up along tracks and by gate; measured all track and sidings; general cleanup of OTM supplies/consolidations; paperwork on recent purchases and donor thank yous; cleaned up on-hand rail piles/short stacks; Ardenwood station platform inspection and measurements; report writing, documentation, & purchase follow up; fixed the Siward gate alignment.

2/7/21 (Sun) - Volunteers: B. Sorel, D. Waterman (8 hrs); J. Goldie, S. Rusconi (5 hrs). We were able to hold our first outdoor track work day for 2021. Several work items were completed today that could be done outdoors and with separation: relocated the north rail pile into the two other piles and sorted by weight; picked up 3 odd rail sticks from work areas and returned them to respective piles; rounded up three 7' 40# rails for making guard rails and staged by tool car; continued to pull out the dead fall and some tree branches by the rail storage area; lifted the low spot in the turnout and tamped 30' of ballast.

2/28/21 (Sun) - Volunteers: B. Sorel, D. Waterman (7 hrs); J. Goldie (4 hrs). Good weather enabled the crew to get a few more things done on the track today: debugged the welder engine that is not running correctly; cleaned up the brush pile from the oak trees; moved 2 pallet stacks of joint bars to the OTM area; moved miscellaneous plates and bars to the car barn stack; stacked up the rotten ties for removal to tie pile; car barn clean up and prep work; labeled the 50# SPCRR rail.

3/7/21 (Sun) - Volunteers: D. Waterman (16 hrs); B. Sorel (8 hrs); J. Goldie, S. Rusconi (6 hrs). Work commenced on the Farmer's Crossing rebuild and enhancement project: cut two rails; removed 8 frozen bolts; extracted the two guard rails; removed spikes & two 20' rails; 10 ties; drilled 8 new holes; scraped down the dirt and removed the tie remains. At the car barn we completed: cut a cracked rail in half to salvage two 8' guard rails (needed for up front); pulled out two gauge bars to use on both sides of crossing; straightened the #1 bar for the turnout and installed it. Last week David obtained lumber for the crossing; received the 60# OTM (plates, bars, and bolts).



Brook Rother on tractor finishes clearing the huge poison oak patch. Photo: David Waterman

continued next page

3/14/21 (Sun) - Volunteers: J. Goldie, B. Sorel, D. Waterman (8 hrs); S. Rusconi (6 hrs). We completed the rebuilding of Farmer's Crossing and more: prepared supplies on the tool car; loaded eleven 6' ties on the push car (our first use of the 6' ties); placed the ties on 24" centers; used a string to check height and aligned them on center; bolted in the rails - had to adjust 1 hole is all out of 8 new holes; changed out the rusted flat bars to toe bars; spiked rails into place/gauge monitoring - 40 spikes; adjusted base rock under ties and installed some ballast rock; tamp, tamp and tamped; added ballast, profiled the ballast and tamped a bit more; installed the crossing planks: seven 4x6, two 4x8, all 12' length; drilled 65 holes and installed 65 ten inch bridge nails; installed temporary road material ramps on both sides to open the service road; cleaned up the old tie scraps (they were only bits); we were also able to clear the entire grove of branches and leaves down and on both sides of the track (build up was very high since we did not clean the track in 2020).

3/11,12/21 (Thurs, Fri) - Volunteers: B. Rother, D. Waterman (20 hrs). Cleared massive patch of poison oak; we boarded up PC 20 for security; did end platform and railing work on NWP caboose 6101; planned next steps for the Whitcomb locomotive rebuild.

3/21/21 (Sun) - Volunteers: B. Sorel (8 hrs); D. Waterman (7 hrs); J. Goldie (6 hrs); S. Rusconi (4 hrs); J. Stutz (3 hrs). Recent rains have enabled the grasses to invade the new track (which lacks full ballast). Work included: mowing up and down the new track; weed whacking between the ties; mowing around the rail piles; removed a frozen bolt to remove a pair of joint bars that looked like a tripping hazard; did oak grove clean up, removal of snags and dead branches; tool maintenance and clean up; did flange check on the new crossing.



Farmers Crossing Rebuild crew: David Waterman, Bruce Sorel, Steve Rusconi (left to right). The 6-foot ties also doubled as social distance spacers.

Photo: John Goldie



Farmers Crossing Rebuild-The finished project.

Photo: John Goldie



BEFORE

Photo: John Goldie



AFTER

Photo: John Goldie

MISCELLANEOUS

Feb 13 (Sat) - Volunteers: S. Boyer, J. Burgess (1 hr). Cleared small branches off track after windstorm.

Feb/Mar - Volunteer: D. Marenzi (50 hrs). General Manager/Curator duties.

Feb/Mar - Volunteer: JS Burgess (44 hrs). Worked on March/April edition of *The Hotbox* newsletter, and started on the May/June edition.

Feb/Mar - Volunteer: J. Boyer (8 hrs). Membership duties. 🚂

TRAIN ORDER BOARD

If you would like to help the track crew with some needed supplies...

You can purchase some important items that are needed (oil can, wrenches, flashlight, etc.) on the track crew's **Amazon Wish List**. Amazon will ship these items free of charge. Please choose the shipping address titled "**SPCRR's Gift Registry Address**." The link to the Wish List is:

https://www.amazon.com/hz/wishlist/ls/3UEP6ICIB5BUK/ref=nav_wishlist_lists_1?encoding=UTF8&type=wishlist

If you would prefer to help by providing a monetary donation, go to www.spcrr.org and click on the "**DONATE**" button at the top right side of the screen. Please follow your online donation by sending an email to info@spcrr.org to let us know your donation is for the "Track Expansion Project." If you would rather write a check, please make it payable to "SPCRR" and mail to: SPCRR, PO Box 783, Newark, CA 94560. **THANK YOU!**

Ardenwood Historic Farm Is Now OPEN by advance registration only

Reservations can be made at: www.EBParksOnline.org

(Note: No transactions will be made by park staff)

The train will remain closed until further notice

The park is open limited days & hours:

Wednesday/Thursday/Friday 11-4; Saturday/Sunday 10-4

Animal feedings and other hands-on activities are currently cancelled.

2021 SPCRR Board of Directors and Managers

President - Brook Rother	president@spcrr.org	530-559-4249
Vice President - John Goldie	vice-president@spcrr.org	408-784-1611
Secretary - Ken Underhill	secretary@spcrr.org	925-373-6884
Treasurer - Jack Burgess	treasurer@spcrr.org	510-797-9557
Director at Large - Andrew Cary	director-at-large1@spcrr.org	510-324-6817
Director at Large - John Stutz	director-at-large2@spcrr.org	650-933-0086
Director/General Manager - Don Marenzi	general-mgr@spcrr.org	510-456-8840
General Manager - Don Marenzi	general-mgr@spcrr.org	510-456-8840
Curator - Don Marenzi	curator@spcrr.org	510-456-8840
Safety Manager - Bruce Sorel	safety-mgr@spcrr.org	510-582-2004
Operations Manager - Barry Lependorf	operations-mgr@spcrr.org	925-457-7754
Chief Mechanical Officer - David Waterman	master-mechanic@spcrr.org	415-602-7377
Restoration Manager - Gene Arrillaga	restoration-mgr@spcrr.org	510-690-4687
Track Manager - John Goldie	mow-mgr@spcrr.org	408-784-1611
Collections Manager - Jay Shellen	collection-mgr@spcrr.org	510-754-5311
Membership Manager - Julie Boyer	membership@spcrr.org	510-378-3469
Newsletter, Publicity and Special Events - JS Burgess	info@spcrr.org	510-508-8826
Webmaster	webmaster@spcrr.org	

2021 SPCRR EVENTS CALENDAR

Train operations normally begin each year in April. At this point in time we do not know when the train will re-open. When we have new information we will update the SPCRR_Members group (*see how to signup below*), our website, and Facebook page.

www.spcrr.org

www.facebook.com/spcrrmuseum

Car Restoration begins again soon! For more information, see page 17

Track construction is ongoing. For more information, see page 17

The train will remain closed until further notice

Earn funds for our Museum at NO COST to you!

For the past several years, SPCRR has partnered with AmazonSmile to receive funds from purchases made at Amazon at **NO COST TO YOU!** Just log-in at the **AmazonSmile** website instead of regular Amazon. The prices are exactly the same... the difference is that AmazonSmile will give a portion of each purchase to our museum. **To sign up, click on the box on the right, or go to this link:** <https://smile.amazon.com/ch/94-2638194>

Shop at AmazonSmile
and Amazon will make
a donation to:

SPCRR

Get started

amazon smile

JOIN the SPCRR_Members group at www.groups.io to receive up-to-date information, workdays and announcements. We promise that your In Box will not be filled up with trash--we average just 1-3 posts a week. It's easy! All you need to do is email webmaster@spcrr.org and Andy, Ken or Jay will set you up.

Directions For Workdays

Volunteers cannot drive beyond the regular entrance parking lot when the Park is open to the public (between the hours of 10 am-5 pm, every day except Monday). When the Park is open, we must use the gate at the end of Siward Dr. at Ridgewood Dr. (near the Car Barn). **IMPORTANT: the gate is kept locked, so you must contact the project manager BEFORE the workday so he can arrange to let you in. See the contact information shown in each workday notice.** If you cannot reach a project manager, call 510-508-8826.

From I-880:

Take I-880 to the Dumbarton Freeway/Route 84 West toward the Dumbarton Bridge. Exit at Newark Blvd/Ardenwood Blvd and turn right onto Ardenwood Blvd. Continue 1 mile (past the Ardenwood entrance) and turn right onto Paseo Padre Pkwy at the traffic signal. Continue 1 mile on Paseo Padre Pkwy and turn right at the traffic signal onto Siward Dr (just before the I-880 overpass). The gate into the Park is at the end of Siward Dr at Ridgewood Dr. You need to call the project manager for that workday to meet you at the gate. Once you enter the gate, proceed on the gravel road toward the left and park your vehicle at the Car Barn.

From Highway 101 on the Peninsula:

Take Highway 101 to Route 84 East over the Dumbarton Bridge. Exit at Newark Boulevard/Ardenwood Blvd and turn left onto Ardenwood Blvd. Continue 1 mile (past the Ardenwood entrance) and turn right onto Paseo Padre Pkwy at the traffic signal. Continue 1 mile on Paseo Padre Pkwy and turn right at the traffic signal onto Siward Dr (just before the I-880 overpass). The gate into the Park is at the end of Siward Dr. at Ridgewood Dr. You need to call the project manager for that workday to meet you at the gate. Once you enter the gate, proceed on the gravel road toward the left and park your vehicle at the Car Barn.