

January, 2015 Edition. Hotbox is a monthly bulletin of The Railroad Museum at Ardenwood, designed to update members and the general public about activities, work events, and volunteer opportunities at the museum. Questions or comments can be directed to Bruce MacGregor, editor, at bruce.macgregor@comcast.net

The Museum's mission is the preservation, restoration and interpretation of regional narrow gauge railroad history, including Carter Brothers, a pioneer railroad car builder of California. The Museum is operated by SPCRR, a non-profit, 501 (c)(3) corporation of the State of California. The Railroad Museum at Ardenwood is located at Ardenwood Historic Farm, in Fremont, California.

New Focus on caboose 5591

Over the last few months, behind the scenes, we've been taking a closer look at our current restoration project- Northwestern Pacific caboose 5591. There have been some new archeological discoveries- for example evidence of sleeping bunks installed in the car- and there have been new discoveries about the chronology of paint layers, an indication of the car's age. All this detective work - the word "forensics" comes to mind- has led to a more careful analysis and documentation of this complex, many-layered artifact. On page 4, Curator Randy Hees talks about the developments.

At the same time, this project has attracted new financial backing, and a rising sense of its importance to both our mission, and the community we serve.

So here's the sales pitch: not only will you see more about 5591 and the restoration process in coming issues of Hotbox, but you have a unique chance to not only witness, but help first-hand with the investigation.

The Hotbox coverage of these new developments begins when you turn the page. The hands-on opportunity begins with the next work day, on Saturday, January 10 (see page 3).



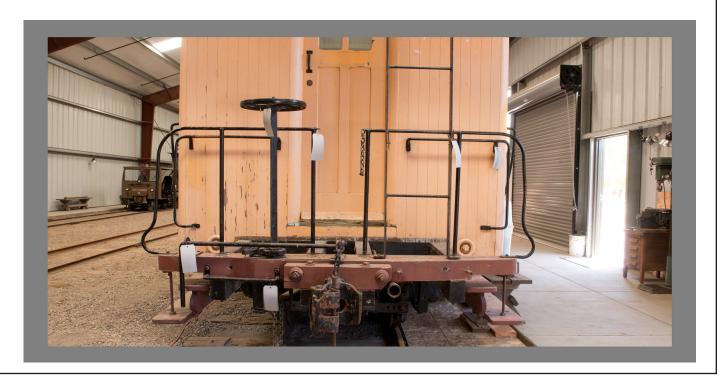
Kevin Bunker examines the oldest paint layers on caboose 5591, which possibly date to the car's construction period in the early 1890's. Paint layers from three separate owners remain intact and visible to researchers (Kevin Bunker photo)

SPCRR Wins the 2014 Fremont Candlelighters' Grant!

On December 20, we learned that the Fremont Candlelighters was awarding SPCRR the full \$9500 it had requested towards the restoration of caboose 5591. The news caps an extremely positive year of fund raising in support of its current restoration project. Combined with a similar amount from the Niles Fremont Rotary Club, nearly \$20,000 has been raised towards this effort. There were worthy competitors for both Rotary and Candlelighters' grant programs, including educational, philanthropic and cultural organizations in our community. We're honored that Candlelighters, and Rotary, were willing to put their resources in the historically important mission of The Railroad Museum at Ardenwood. Our sincere thanks to the Fremont Candlelighters, and the Niles Fremont Rotary.

What will the money be used for? The purpose of the Candlelighters' grant was defined from the beginning as support for recreating historically accurate parts. These included caboose 5591's numerous grab irons, railings, and safety appliances. Those familiar with the car will remember that a 1970's era restoration, while motivated by historical preservation, fell short of accurate depiction of 5591's materials and techniques. Plywood, for example, was used as a work-around for wooden car siding. And replica metal grab irons, railings and other external metal parts were made using modern welding techniques.

We elected to assess the car's metal work and where questions of accuracy arose, replace specific parts with hand-forged, historically-accurate replicas. Tags visible on the photo below shows just some of the parts that have been identified for replacement. The work will be performed by a skilled traditional blacksmith named Berkley Tack, living in the Northwest community of Rainier, Oregon. Later in 2015, we'll look forward to running a feature article on how Berkley makes the parts using 19th century tools and techniques.





Interior, NWP caboose 5591, undergoing restoration work at the Museum Car Barn

Car Restoration Workday

What: We'll continue work on caboose 5591. Projects include installing the T&G finish floor, and more paint sampling in the interior. If the weather cooperates we will move the car outside for the day to give us more light to examine the paint samples.

When: Saturday, January 10, 9:30-5 pm

Where: Car Barn

Who: Randy Hees, Curator 650.347.5055 or randyhees@gmail.com

Curator's Workbench: shifting targets

When we started work on 5591 some years ago, we were planning to simply "get the car in service"... The car looked ok... it had been restored in 1970 by others. But that restoration had some issues... plywood was used in place of car siding... paint and lettering choices were questionable... the interior was configured in a weird way, not at all as it appeared when in service. And perhaps most serious, we believed that that 1970 restoration had erased much of the historical evidence we usually look at before restoring a car. We knew there were problems with the the accuracy of metal hardware, and of course the cupola was removed "with prejudice" by a low freeway bridge on the way south from Sacramento! Even so, the original idea was a cheap, quick and dirty project.

Along the way the target shifted.

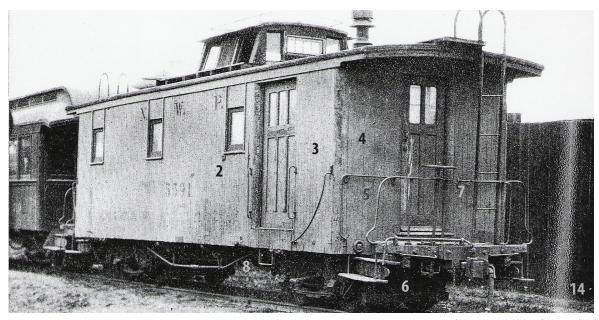
The first year we focused on functionality. We gathered the parts of the damaged cupola, and reassembled it and reinstalled it on the car. We discovered that to fix the platforms we had to remove the floor from the car between the end beams and bolsters... that meant we had to remove the "salon" and side benches. In the process, we discovered the brakes were just wrong... they wouldn't work as installed. So we pulled them off. We dropped the couplers, and working with the park's blacksmith made new draft gear, then reinstalled the couplers. So far so good... we could now pull and push the car.

We found that the car-body still carried some original paint. So we started looking at the body more carefully, identifying what was original, and what was part of the 1970 restoration. The car carried more original material than expected. We found that the car had been heavily rebuilt by the railroad, changing the truss rods from the center of the car to the edge, along the side sills.

As we worked on the car, we were also doing research at libraries and archives. We found records that pushed the car's construction date from 1904 back to the early 1890's... we now know it was originally built by the North Pacific Coast.

As we worked on the car we found more things that we could do better... and the target kept shifting from quick/dirty to slow/right. Since we had to remove much of the floor, we decided to replace it completely with proper tongue and groove material (the 1970's floor was heavy plywood) but replacing the floor called for removing the rest of the interior "furniture"... including the cupola seat boxes. We mortised the T&G at the baggage doors to hold door cages. We planned to move the stove back to its original loca-

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NWP Caboose 5591. Circa 1916

tion in the corner of the baggage end of the car (during the restoration the gentleman in charge had it installed in the center of the car because it seem to him to be a "better, more typical" location. But we were still hanging on to putting back the plywood furniture.

As the car progressed, we started receiving donations to support the work on the car, some quite significant, and with each, we found "cheap" was no longer necessary. The project was not drawing on the groups limited general funds. This year we were awarded two significant local grants, one from the Niles Rotary Club to allow us to replace the plywood exterior siding, and a second from the Candlelighters to allow us to make new end railings, and hardware.

With the changes in the project, we began to revisit our own Restoration Study, particularly our original plan for the interior. We are now looking at new interior furniture, following NWP and SP standard practices (the two most likely influences on the car's later appearance).

In the near term we are concentrating on the exterior of the car, preparing it for new siding. We are making detailed drawings of railings, and installing a revised brake system (we have a set of rods and levers in progress, made from salvaged WSLC parts, modified by Bruce Sorrel). New cupola windows have been fashioned by Fran Foley.

On Saturday, January 10th, we will be working on NWP 5591. Projects include installing the T&G finish floor, and more paint sampling in the interior. If the weather cooperates we will move the car outside for the day to give us more light to examine the paint samples. And we'll prepare for new discoveries, and possibly new targets.

Contact Randy for more information: 650.347.5055 or randyhees@gmail.com

Randy Hees, Curator

2014's Final Operating Day

John Goldie

Sunday, December 7, concluded our 2014 operating season. Our regular operating days of Thursday, Friday and Sunday are complimented with select Saturdays and special events such as the December Holiday run weekend. Please see our annual calendar published early in the year for the year's planned operating dates.

Due to the heavy demand, back-to-back trains were run with most out bounds to Deer Park at full capacity with over 100 passengers on our three car trains. Most of the return trips were also completely full. Many of the passengers enjoyed a short tour of the grove at Deer Park to view Monarch Butterflies- guided by Alex. Alex took them to an area with lots of flutter-by activity that the crew had spotted.

Jared, Jay, Helen, Alex and John were operating crew for the day. SPCRR members are welcome to join the operating crew to assist them and also to learn safety and operations skills as well as interacting with the public about our group and its mission.

The day starts out with prepping the equipment for operations, including un-tarping the cars, area clean up, and a safety inspection of the equipment. This includes checking under and around the cars as well as a journal box inspection. Katie, our gas-mechanical locomotive is also serviced, fueled, and a safety check completed before coupling up to the train.



Alex and the rest of the crew got the passengers settled, provided a safety briefing, (no food on the train please, stay seated, and keep your arms inside) and then shared information about the railroad, the farm and any other questions our guests come up with (our guests come up with many good questions - which will be shared in an upcoming Hot Box article).

A hand car demonstration was also given along with a few behind-the-scenes tours for interested guests. One guest inquired about volunteering and we provided him with SPCRR contact information (cards are in the plastic box on 1725).

Helping the operating crew is a great way for members to learn and practice operations skills.

From the General Manager

I am hoping all of you in Hotbox land had a Wonderful and Happy Christmas and New Year!!! A Great Big thanks to all who came out and volunteered for the SPCRR in 2014. When you get this Hotbox at the first of the year, please add up your volunteer hours and send them to general-manager@spcrr.org or 510.785.1343 (leave a message if no answer), asap please, as the Park District wants them at the beginning of January.

We will continue to have Work Days the second Saturday of the month and additional days as we get organized with our list of projects for the year.

HAPPY NEW YEAR TO ALL!!!

Barbara Culp, General Manager

Membership Update

By late January we will send out the consolidated tax letters for 2014 donations given in excess of dues. Dues are also tax deductible, and your canceled check and the clip & save receipt is the reminder for that. Thank you for your dues, donations, and volunteer hours as all of them help the SPCRR operate for the public and meet our group's goals of car restoration. 2014 is an exciting year for us, with the offsite cars and corp yard stored cars all now under cover in the car barn for the first time. Thank you for your continued support!

John Goldie SPCRR MoW Crew, Operating Crew & Membership Manager

Also, having a trained crew ready for our high-load days and the special events at the park (as well as Halloween and Railfair trains) eases the demand on our regular crew. The group also offers a safety class for Brakeman, Conductor and Handcar Operators as well - highly recommended for a excellent overview of the operating rules and live action training about the safe coupling of cars and roll away braking.

A special thank you to the entire Operations Crew of 2014 for another safe and high-capacity operating season on the SPCRR!

(see photo, facing page) Standing in front of Katie on the left is Jared, on the right is Helen, on Katie on the left is Alex, and Jay in uniform on the right.

President's Report

December is the start of our quiet season, though John Goldie has described a rousing final day. Now that the holidays are over, we have a couple months of low park activity where we can get out and about to work on things in public areas.

On the 20'th we shoehorned box car 10 and Katie into the barn, after moving out the Pajaro Valley boxcar (which has the most waterproof roof), one push car and John E's rider car. We also, after many years, figured out how to get a reasonably protective tarping of our open flatcars, though 1725 is still open to the weather. So we now have our rolling stock under better protection than ever before.

Rain and wind brought down eight Eucalyptus trees within sight of our track during the first two weeks of December. Only one was actually on our track, and has been cleared to allow trains past. A 36" tree fell from the grove east of the Car barn, and punched minor holes in the barn roof and sides at the NE corner, but there has been no water damage inside. The park is arranging for a contractor to chip the fallen trees, and I hope get much of this material delivered at the horse barn for replacing the mud holes. We shall see how this develops.

John Stutz, President

Track and Other Work Days

Tentative schedule for January weekend work activities, normally 10:00-5:00

Saturday, January 3 - Car barn track 4 extension.

Saturday, January 10 - Caboose 5591 restoration

Saturday, January 17 - Car barn track 4 leveling & tamping

Saturday, January 24 - Horse barn & fencing TBD

Saturday, January 31 - Car barn track 4 completion(?)

Outside activities are 'weather permitting', and may shift indoors to focus on caboose restoration and/or continued organization of Car Barn contents.

John Stutz, Track Manager president@spcrr.org