

March, 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.

President's Report

During February, we were rained out one Saturday, got the final rails for track 4 bolted up and largely straightened on another, and will try to get track 4 spiked and leveled on the 28th. On the 21st John Erdkamp, John Goldie and I tackled the horse paddock and pasture fences, bracing a couple of badly leaning posts, replacing missing and broken boards, adding backers for some of the rotted board ends, and stops to a couple of the better gates. John E and John G then took John E's speeder out and found that one of the bushy Eucalyptus along the Ridgewood road fence was down across our track, and spent an hour clearing it.

We will be back working on track 4 on February 28, to finish rail straightening and spiking, then level the track and tamp underneath. I hope to finish track 4 off on March 14th (see page 7).

John Stutz, President, SPCRR



The Art of Car Restoration- a textbook case

This is a better-than-usual opportunity to talk about a central question faced in railway preservation: given that old rolling stock typically rolls up thousands of structural and appearance changes accumulated over twenty, thirty, forty or more years of service, how does a museum go about choosing the target date the car will be restored to?

This problem- or rather it's solution- is at the heart of the document that remains after a car is restored, the Restoration Report. The document presents crucial evidence to support the choice that a museum must ultimately make- to commit dollars and volunteer hours to making the car as close a match to the chosen year as is possible. But why THAT year?

The long journey to restore Northwestern Pacific caboose 5591 is a textbook case in addressing the problem, and (spoiler alert) we should quickly add that the problem is not yet solved.

Certainly, one criteria for choosing the target restoration year is the availability of hard evidence, meaning, knowing enough detail about the configuration of the car in a given year to choose historically correct hardware, paint, lettering and interior details to guarantee a matching restoration.

Until six weeks ago, caboose 5591 offered us few choices. Photographs of the intact, operating car were available only in the narrow band of years just before the car's retirement in 1930. The photograph on the following page, taken ca 1929-



ca 1908-1915, at Monte Rio. Northwestern Pacific Railroad Historical Society

1930, is an example. Offering details of the cars exterior hardware (like grab irons, end platforms and truss rods), the photo (and one additional photo from the same period) provided convincing evidence for details of a circa 1930 appearance, and a strong incentive to pick a compatible target restoration date.

These photos were the source of the data used to restore the caboose in 1968, by the Pacific Coast Chapter of the Railway & Locomotive Historical Society.

But six weeks ago, two new photos- unknown to our group- surfaced. They show our caboose at a significantly earlier period, for example, in the photo above, taken ca 1908-1915. These photographs portray a simpler car, with fewer grab irons, external hardware, or end ladders.

The fact that the new photos surfaced part-way through our restoration project was inconvenient, but not exactly unexpected. More focus on the car by our museum has meant more interest from sister groups like the Northwestern Pacific Railroad Historical Society- our benefactor and the source of the new photos. New photographs mean a richer understanding of the car's history. But what did this windfall do to the central problem of determining the target restoration date the museum must work towards?

Pardon a sports metaphor, but yes, it threw us a curve ball. Now evidence could be brought to bear to support a restoration targeting either the 1908-1915 period or the 1929-1930 period- at least twenty years apart. Is there an equal amount of evidence for either choice? That question is being considered as we speak, and future *Hotbox* articles will follow the debate, and its outcome.

But there's one other important criteria we haven't yet mentioned, vital in determining the target restoration year. That criteria is the *story* the museum wants the car to tell. This is a purely interpretive question, but a really important one. It speaks to the role the finished, restored car will ultimately play with the public. What historical significance- what *story*- will one target year convey that another will not?

With 5591, there are many possible stories. One example: in 1916, the federal government mandated safety appliances for railroads- more grab irons, more hand-holds- to make the train crew's job safer. Hence the dramatic appearance of new external hardware on our caboose at some date following the 1908-1915 photographs. Is this the story we want to tell?

That question too, is being debated as we speak. The answer- the choice of a single target restoration year- will be the outcome of an fascinating analysis of photos and remains from caboose 5591, as well as their relevance to our museum's interpretive mission. They are all good questions to be asking.

As the analysis plays out, an answer will emerge. Stay tuned!



ca 1929-1930, at Pt. Reyes Station. Northwestern Pacific Railroad Historical Society

Curator's Report

Restoration work days

March 7th is a caboose "study" day. The curator's committee will be meeting to look at the caboose in detail, now that the siding is off on one side, making restoration decisions, and looking for evidence of the car's history.

March 14th is a caboose work day. This is our regular work day.

Additionally we work most Thursday afternoons... not always on the caboose... sometimes we clean the car house... or get set up for events.

Caboose Progress

Over the last several weeks we have pulled the 1968 plywood siding off one side of the caboose (part of the original R&LHS restoration), both to get ready to install new milled car siding, but also to see what was underneath, how much old wood, how complete and stable the car's framing was, and hopefully to find evidence of how the car had been configured.

We found a spliced side sill, with original material in the center, but both ends made from new material, installed in 1968 as part of the car's original restoration. The splices are not the official MCB diagonal saw tooth splice we have used on 1010, but instead are simple butt joints, reinforced by steel plate behind on the inside face.

Most of the car's wall framing is present and in good condition. All the vertical tie rods are present (this is surprising... many times cosmetic restorations just cut the rods). There are new vertical posts added every 4' to support the edges of the plywood... These are unnecessary for our restoration, but we are likely to leave them in place... removing them could be disruptive.

Repairs are needed to this interior framing. One girth or nailing strip is rotten so will be replaced. Replacing it will give us access to several of the posts, which show signs of decay, and can be consolidated with epoxy. The posts on either side of the baggage doors need some work.

The big find was some extra blocking, part of the wall framing, which appears to be the support for a bracket for an interior folding bunk. Kevin Bunker has found drawings of a SP caboose bunk, which may be appropriate for our car. We expect to be comparing the evidence on the car body to the drawings on the March 7th work day.

All in all the car is in better shape than expected. (continued, next page)

Car Restoration workdays

where: Car Barn

when: Saturday, March 7, 9:30-4:30 pm and March 14, 9:30-4:30 pm ; in addition, some Thursdays.... check at the museum.

what: March 7 is focused on inspection, study and interpretation of physical caboose evidence; March 14 is focused on restoration work.

who: Randy Hees, Curator

A photo of the car, late in its railroad service (ca 1929-1930, see pg 3) had been found that shows the car's truss rods. That photo shows 4 truss rods rather than the two currently found on the car. We are now planning to add a second set of truss rods... likely moving the current outboard truss rods inboard, and making new outer truss rods.

So far, only one side of the caboose has been laid bare for inspection. Soon, we'll get a look at the opposite side.

Randy Hees, Curator



David Waterman (left) and Ken Underhill (right) inspect caboose 5591 after removal of its plywood siding. This modern material was incorporated in the car during a 1968 restoration for the Railway & Locomotive Historical Society. In questioning some of the methods and materials of this earlier restoration effort, our museum exposed much original framework in the car, providing important clues to how, and when, it was built.

(Randy Hees photo)



Membership Update

To update the SPCRR for a change or address or new email ID, please email me at membership@ spcrr.org with the new information.

Our annual membership renewal campaign will occur in March / April - annual dues remain at just \$20 per year or upgrade to a LIFE membership for \$250. Thank you for your continued support.

February Corral Work Day

On Saturday March 22 a small work crew of John E, John S and John G focused efforts on corral and paddock fence repairs for Stella. We were able to install braces on two posts that were starting to lean, reattached several fence planks, and replaced a few other planks that had come loose. Another important task was to wrench in the plank bolts on all the posts, and hammer down any popped nail heads to remove any scratching hazards. The fence line was now back up to standard and Stella supervised the work. Follow-on work will be re rehang the "Do Not Feed" signs. This is a great example of some light duty, high impact maintenance that new members can help support (you don't need to be named John). I am also working with a local Boy Scout project to suggest additional future Eagle Scout projects to help upgrade our horse facilities. One current idea is for some replacement gates which could be built off site. Hope to see you out there on a future work day.

John Goldie, Membership Coordinator membership@spcrr.org

Track Workdays

what: finish Car Barn siding 4 (tamping, ballasting, aligning) where: Car Barn when: Saturday, March 14, 10 - 4:30 pm

who: John Stutz, track manager

Keeping Track of Track!

This is how the Eastern Terminal yard looked in September, 2013, about eighteen months ago. All the switches into the distant Car Barn are completed (as are the tracks into the Car Barn) but the closest switch to the camera, and the one just after it, both come to dead ends.

If you're keeping track of the track, the three tracks inside the car barn are numbered 1, 2 and 3. All are finished, and in operation.

That second switch (with its harp switch stand mast visible about dead center in the photo, vertically speaking) is the lead switch to tracks 4 and 5. These are the spur tracks currently under construction. These two spurs lie outside the Car Barn building, on its right hand side, and will be used for outdoor storage. Eventually, a corp yard fence will enclose tracks 4 and 5 for security.

The closest switch to the camera in this photo allows the main line to veer off to the right. It will include a passing siding at the future site of the Eastern Terminal Depot. It will represent the last phase of track construction in the Eastern Terminal.





Jack Burgess photo

Looking Ahead: anticipating the restoration work of 2016, and beyond

Pictured above is a February 10 visit with Glenn Guerra (on the right, with Kyle Wyatt in the middle, and Randy Hees on the left). Glenn is a nationally recognized authority on wooden car restoration, and a specialist in the skill of 19th century metal passenger car roof construction.

Glenn has offered to consult on a future restoration project- one that we haven't talked much about in the pages of *Hotbox*. But looking ahead, it is likely that within the next

twenty four months, our group will begin to focus its restoration efforts on combine 1010, whose metal roof (you probably already guessed) is in dire need of replacement.

Metal car roof construction is something of a lost art. It involves joining rectangles of what was once called "terne metal", a plating of lead and tin on iron sheets, specially designed to inhibit corrosion. Today, in our toxic-conscious era, the lead component is replaced with zinc, but the metal panels are still assembled in the traditional way- by crimping the edges of two adjoining panels (called pans), and then soldering the panel together in a seamless, leak-less joint. Some-thing like fifty metal panels were assembled in this fashion to create 1010's original roof, but the car's advanced age (over 130 years) finally took its toll. The roof is now badly pitted in many locations, exposing the underlying wooden roof frame members to the elements. It can no longer be effectively patched and sealed.

1010 is not the only car in our collection that will require a new metal roof. South Pacific Coast caboose 47, and the Arcata & Mad River coach, have similar roofs, in similar conditions. So taking the long view, we've talked to Glenn about holding a hands-on workshop to teach the art of metal car roof restoration. Even though actual restoration work on 1010 won't begin until at least 2016, the workshop will give us a chance to acquire, and practice, a vital skill we'll need (and need again) as we take on the restoration of progressively more challenging cars.

Glenn's workshop has not been scheduled yet, but we're hoping for a weekend in 2016 when not only members of our group, but other interested museums can participate. Please watch the pages of *Hotbox* for workshop announcements.



Courtesy Randy Hees