December 2015 Edition
The Hotbox is a monthly bulletin of The Railroad Museum at Ardenwood, designed to update members, volunteers, 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 in California. The Railroad Museum at Ardenwood is located at Ardenwood Historic Farm in Fremont, California.

Mark your calendars for December 12! Our Annual Holiday Dinner, General Meeting, Election; plus a Special Presentation by historian Dave Eggleston

Our Annual Holiday Dinner, General Meeting, and Election of Officers will be held on Saturday, December 12. We will gather at the Granary between 5:30-6:00 p.m. to setup tables—dinner will be served by our friends at Dino’s between 6:00-6:30 p.m. Please bring either an appetizer, dessert, or drinks. Please let us know if you are attending and how many guests you will be bringing no later than December 9 so we can estimate how much food to order. R.S.V.P. to: publicity@spcrr.org, or call 510-797-9557.

Following dinner we will hold the Election of Officers followed by a very special presentation by historian Dave Eggleston. Find out more in Dave’s article on page 2. It will be a fascinating show and you won’t want to miss it! Following Dave’s presentation we will discuss restoration project priorities (see the article on page 8).
Research Corner:
Kicking Off The NC 253 Boxcar Study

Dave Eggleston

This is my first update on thoughts and discoveries as I begin to craft the Monterey & Salinas Valley box car restoration feasibility report for the Museum. I first wrote about the study in the October Hotbox and I will be talking about the project in more detail at the upcoming General Meeting on December 12. Until then, here’s a bit more information and some of my thinking on the project.

The Monterey box car, which I refer to as “NC 253” (that was its last in-service lettering), lived a fairly neglected life which thankfully assured its survival until SPCRR rescued it. The car remains the only known survivor of Tom Carter’s first two orders in 1874 for the North Pacific Coast and the Monterey & Salinas Valley railroads. These orders accounted for his first 150-200 narrow gauge freight cars. Because NC 253 ran on two railroads that were never very successful (the M&SV followed by the Nevada Central in 1880), the car saw little heavy use. The light use, the climate, plus a resourceful Nevada Central shop crew (who kept the car operational by cannibalizing other cars for parts) meant that NC 253 survived until the Nevada Central’s abandonment in 1938.

By pure luck NC 253 was not scrapped in 1938—it was de-trucked and turned into a shed in Battle Mountain, Nevada. Languishing there for a few decades, it was finally noticed by casino owner Dobie Doc who acquired the car and moved it to Boulder Canyon. There it was placed in a static train display and painted. Out of reach and protected by thick paint, the body survived as a billboard. Around 1989 the SPCRR negotiated a remarkable agreement to swap the car for a fake, but similarly painted car body. NC 253 was then moved to Ardenwood where it was kept under tarps until being moved into the Car Barn.

Researching NC 253 will be very interesting. Despite knowing the general history of the car, I am actually dealing with an artifact that has little specific recorded history, has been modified or refurbished multiple times, and in general has been neglected for the past 141 years. My project looks pretty straightforward, but NC 253 is something of a mystery car, with a history full of gaps and some critical parts missing. It has lived in the shadows for a long time. Everyone agrees that we currently lack many of the specifics needed to do a respectful...
2015 Haunted Train was a very “Spook-tacular” Success!

Andrew J. L. Cary, Haunted Train Manager

This year’s Haunted Train was spectacular, or perhaps a “spook-tacular” success. First some statistics:

• We hauled around 3,000 children, adults, and infants.
• We ran a total of 33 trains.
• We had a total of $18,789 in ticket and glow stick sales. Estimated revenue after expenses is over $17,000! This is a new record.
• We sold $6,334 in online tickets for the first time.
• We volunteered over 800 man-hours to operate the event and over 300 man-hours for setup and take-down—a total of over 1,100 man-hours. Many of these hours were provided by non-members.

Special thanks need to go out to some of the folks, many of whom are not members and who come out to volunteer for the Haunted Train year after year to support the SPCRR. These folks are essential to the success of our event:

• The Ekstrom Family provide us with the Narrator (Bill Ekstrom), the ghost bride (Janet Ekstrom), many of the pirates (Scot, Scottie, and Hollie Ekstrom and a host of their friends and neighbors), and have even pinch hit for ghost protector (glow stick) sales (Barbara Ekstrom).
• The Frank Family provide us with Ticket Sales (Linda Weathers & Barbara Frank), the Stationmaster (Barbara Frank), and the sound and low voltage lighting systems (Robin Frank, who also fills in as Last Chance).
• Elizabeth Cary provides the Ardenwood witch (yeah, I know she does the St Paddy’s dinner too).
• Ruth and Henry Tyson provide the elaborate Jack-O-Lanterns to decorate the Ardenwood Station area.
• The 4-H club that comes out every year and flits about the woods and the haunted pumpkin patch.
• The students of Kennedy and Mission High Schools who haunted, pirated, train robbed, and helped sell glow sticks while earning community service hours.

It also can't be done without the regulars… there are too many of you to call out (but you know who you are), and with the newbies coming out to the woods for the first time. All of you worked hard to make this event the success it was. THANK YOU EVERYONE!!!

Photo: Janne Wissel
Above Photos: AJL Cary
NWP Caboose No. 6101: Where Are We Now?

Kevin Bunker,
Curator/Caboose Restoration Project Coordinator

It comes as no surprise that our former Northwestern Pacific narrow gauge caboose has continued to reveal abundant mysteries as we have delved further into researching its “bones” and structure. That effort serves two principal purposes: 1) just asking questions about how the car was built and used generates better data that will guide the restoration work, and 2) recording the visible information into a permanent set of scale architectural plans preserves a “virtual” caboose both as it is now and as it will appear by the time we are done with its restoration. What we learn throughout this intensive research and drawing process will, in turn, influence the Restoration Guidelines and, in the end, the final Restoration Report.

The drawing process and forensic data gathering go hand-in-hand and cannot, indeed should not, be separated. Each action reciprocally feeds the other. As our CAD engineer/draftsman Daryl DiBitonto probes the car body and frame he learns a great deal. And, as a team working within our historic preservation and museum organization, we will develop a greater understanding of this artifact car while following our core mission of preserving and interpreting historic California-built narrow gauge equipment. Daryl has been charged with “mapping” every empty slot, hole, and plugged hole in the subframe, and he has already placed that crucial information into his evolving CAD drawings. Suddenly we now see patterns emerge in what was heretofore nearly invisible. Better put, what was seemingly meaningless—the array of holes—makes more sense once plotted within graphic floor plans and parallel elevation drawings.

The holes now charted tend to be gathered under the cupola within the center of the caboose. Most holes are in the range of 1/2” to 5/8” diameter. What was left out of the car when it was renovated by the Pacific Coast Chapter/Railway & Locomotive Historical Society and Bethlehem Shipyards in 1968 were the railroad’s functional air brake auxiliaries: an emergency air pressure dump valve at the end of a vertical pipe, and a related (but separate) air brake pressure gauge and its feed pipe. We now see where these elements emerged from underneath the car. However, several other holes are there, also vertical, and still mysterious.

From observing some century-old interior images of other American railroads’ circa-1890s-1910 cabooses, we have learned that there had once been a fairly widespread use of what was called a “conductor’s brake”—a “third” brake wheel if you will. This vertical apparatus was usually mounted in the vicinity of a caboose’s cupola. This permitted the conductor to secure the car, or bring it to a halt, from inside the caboose when the car was rolling free from the train (as in a gravity switching move) without having to go outdoors onto either end platform to work the manual brakes. This arrangement may have been more popular in areas where it snowed or was very cold, but conductor’s brakes were also standard equipment on cabooses owned by the Central Pacific-Southern Pacific and Atchison, Topeka & Santa Fe systems in the 1890s-early 1900s. That the SP and AT&SF were the founding partners in organizing the Northwestern Pacific Railroad in 1907 is very important: as we bring this singular caboose back to a more historically accurate and serviceable
condition, we must ponder how much both of these large railways influenced the far smaller NWP before the founding partnership broke up in the early 1920s. What we still need to learn is how the early NWP dealt with this car that they inherited from the North Shore Railroad and, by extension, North Shore’s predecessor the North Pacific Coast Railroad.

In summary, we are now trying to relate the holes in the subflooring to missing elements. Daryl recently recorded all of the data about the present roofwalks assembly and will add that to the drawings. The roofwalks were not present on the caboose in the circa 1913 period, which is the goal we are aiming to re-create. Even so, what is on the car now must be fully documented before it is permanently removed, even though the roof assembly is entirely a modern 1968 re-creation of the late 1920s caboose. We will soon assess the dry rot damage found in the B-end body bolster. This decay compromises our ability to return a second (long-missing) set of truss rods to the frame without harming the car’s structure. Too, the caboose should not be moved much until the body bolster is sound, whether by full replacement or other more advanced repairs.

This winter and perhaps through spring of 2016 we will also do more aggressive historic paint layers research on the caboose’s side walls in the vicinity of the cupola to determine how much change there was in the observation platforms/storage lockers. If there was a conductor’s brake in this car between the end of the 19th century and the start of the 20th, this particular area will have to be intensively researched and “mapped” in the interior drawings. Only after that is accomplished can we begin planning how to restore the interior or make replica built-in furnishings.

Last, and by no means least, we have just received a slew of custom-made parts from our professional blacksmith, Berkley Tack. These include replica end railings, two brake staffs, a radial corner railing, two new ladders, and some hand grab irons made to match period Master Car Builders (MCB) standards after borrowing some dimensional data from Carter Brothers styling. Several grabs, including the radial corner grab, copied historic originals found on our caboose. All of these items look terrific! They replace very inferior and unsafe welded parts made up by Bethlehem Shipyard, who renovated the caboose for the PCC/R&LHS in the late 1960s. In due course, Berkley will be manufacturing more forged parts for our car, but this round fulfills the needs paid for by the generous and recent $10K grant from the Candlelighters Association.

Stay tuned!

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Shop at AmazonSmile (www.smile.amazon.com) instead of the regular Amazon website to help our museum at no cost to you. When you shop through Smile.Amazon.com our museum will receive $0.05 for every dollar you spend. This doesn’t sound like much, but it really adds up if we all join together to purchase our items through AmazonSmile. Amazon donates the money to our group as part of their efforts to help non-profits. It only takes a minute to sign up.

Begin by going to https://smile.amazon.com/ch/94-2638194 and sign in with your regular Amazon account (or create a new account). At the next page scroll down to Pick Your Own Charitable Organization and type in “SPCRR,” then click on the “Society For The Preservation of Carter Railroad Resources.” Thank you so much for helping the Railroad Museum at Ardenwood!
President’s Report

John Stutz

Andy Cary’s final count is in on the 2015 Halloween train—about 3,000 passengers were carried over the two weekends! Our thanks to all who helped make this possible. Halloween cleanup took several Saturdays, possibly because we did a neater job of packing things away. However we got the village stacked away and covered before the first of the heavy rains hit, and the tables and benches were returned to their original locations on the 14th.

We received a load of crushed concrete for the roadway along the Car Barn’s west side, and the truck drive did a preliminary spreading of 2”-3” in depth on the 14th. This was made much easier by Jack Burgess pointing out that the driver could spread out the load while it was being dumped, so relatively little was needed to done by wheelbarrow. So far it has only been leveled by eye—it will need some adjustment as the winter rains reveal the depressions. This will go a long way toward eliminating the tracked mud problem we had during earlier wet winters.

A current concern is weather protection for those cars that will be left outside of the Car Barn. Box car 10 and the passenger flat cars will need to be tarped as soon as the Christmas runs are finished. In the meantime, we can cover a couple of the cars on Saturday, November 28.

Museum boxcar 472 has been moved back into the Car Barn and John Erdkamp is touching up the paint. Gene Arilla will replacing the other buffing block soon. Our current main concern with 472 is the state of the roof, which is now decidedly porous due to warping boards. Giving this car a waterproof roof while preserving the restoration date appearance is proving difficult, and ideas will be welcomed.

All voting members will be receiving election ballots soon. All members and volunteers are invited to our Annual Holiday Dinner on December 12 (see page 1 for more info). Everyone is welcome, but please RSVP for yourself and guests so we can estimate how much food we need.

Revised Museum Logo

Recently the Board of Directors took a fresh look at the Museum’s logo and made a slight change to give it better readability. The words “At Ardenwood” were moved to the lower half of the circle. Shown below is a copy of the old image on the left and the new image on the right:
**Weekly Workdays**

**Track, Restoration & General Maintenance**

*Ken Underhill*

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**Date(s):** Most Thursdays and some Saturdays

**Time:** Email or Call (see below)

**Meet At:** Car Barn - See “Directions”

**Special Abilities or Work Equipment:** N/A

**What to Bring:** Long pants, work gloves, and steel-toe boots if you have them. Water is provided. If we are working on an outdoor project, bring a hat, long-sleeve shirt, and sunscreen. We generally go off-site for lunch, but you are welcome to bring your own lunch if you prefer.

**Progress Last Month:**
Saturday, 11/7/15 – This workday was focussed on putting away the Haunted Train props and signs. In addition we moved the recently painted SP 472 into the Car Barn (which involved some car shuffling), and mounted the first of the motion sensitive lights on the Car Barn (it is temporarily wired). Thanks to Stuart Guedon, John Stutz, & Ken Underhill for a successful workday.

Thursday, 11/12/15 – Dave Fisher and Ken Underhill worked on the fence up front, finishing the remaining scrapping and priming. John Erdkamp and Randy Hees worked on finishing the lettering on SPC 472 (only one side was completed in time for Railfair).

Saturday, 11/14/15 – Several projects were tackled. The larger work crew consisted John Stutz, Gene Arrillaga, Stuart Guedon, Tony Peters, and Ken Underhill. In the morning we worked on returning the picnic tables and benches used for the Haunted Train to Deer Park, and in the afternoon we worked adding gravel to the area between the Car Barn and the yard. John Erdkamp was also out working on lettering SPC 472; and Brook Rother and Rich Nealson evaluated the ballast car for possible repair.

Thursday, 11/19/15 - Dave Fisher and Ken Underhill finished repainting the fence up front.

**Contact:** Ken Underhill  
**Email:** kcunderhill@yahoo.com  
**Phone:** 925-373-6884

**Notes:**
- Everyone over the age of 14 are welcome.
- Thursdays often include restoration work. I post workday updates on the SPCRR Members list on Yahoo Groups (free to join—you just need a Yahoo account, then click on “Groups” at the top of the page, and next search for “SPCRR Members” and follow the instructions to join the group.)
- Please contact me in advance so I know how many to expect (prefer email). That way I can have jobs ready for you when you arrive, Please include your name, cell number, and email so I can contact you if I have to cancel the date or change the time.
Restoration Project Priorities

Kevin Bunker, Curator
Jack Burgess, Board Member

It has been a year or so since our group previously discussed restoration priorities. Since that time, it has been recognized that we need to complete all of the needed research on projects before a restoration is started. Full restoration of caboose 6101 was thus temporarily stopped until a Restoration Analysis Report for the caboose can be completed. That report is currently being written.

Priorities for restoration of our equipment should really a member-driven exercise. Since we have already received grants from the Rotary and Candlelighters for the siding material and blacksmith parts for caboose 6101, that project needs to be restarted as soon as the Restoration Report has been completed and approved by the Board. The Candlelighters grant came with a funds encumbrance deadline, so we had to determine dimensional specifications for the necessary replica ironwork and have it fabricated before year-end 2015. That deadline has been met and the forgings were recently delivered courtesy of Collections Manager Bruce MacGregor. But there are some other smaller projects which can be undertaken in the meantime after a condition survey and of an outline of the needed steps has been written.

One of these projects is the replacement of the roof on the box car 472, which should be a fairly straightforward project. The basic approach on such less-involved projects would be generation of a simple, written Project Report by Restoration Manager Brook Rother or others. That report would be based on an on-site inspection of the car and include: (1) a scope of work and what is to be accomplished; (2) the budget; (3) materials list including specifications for paint, hardware, etc.; and (4) the general steps to be followed. The Project Report would need to be approved by the Curator and Board before work begins.

The replacement of the roof on box car 472 would be the type of project which would get our restoration work back underway and would go toward the full completion of another piece of equipment.

This approach could also be used for “replacement in kind” projects prior to the completion of a full Restoration Report. For example, there is concern that one bolster under caboose 6101 has signs of rot and will need to be replaced. Once confirmed and the existing bolster documented, a Project Report will be prepared to allow that work to begin soon thereafter. The car would need to be cribbed up to work under it. Completing the bolster work will allow further restoration of the car to resume once the detailed Restoration Analysis Report is complete.

All larger projects henceforth will require Restoration Analysis Report. The first steps toward that goal for box car NC 253 are expected to begin this month. The other equipment in our collection which awaits our attention are as follows:

- Box car 10 – Prepare Project Report to replace roof and siding, repair frame as needed, paint and letter, fabricate and install brake beams, and connect brakes.

- Combination box car 444 – Begin study phase by documenting existing condition of the car and any missing hardware.

- Combination passenger car 1010 – The major effort needed for this car is replacement of the metal terne roof. The existing roof first needs to be fully documented, including the state of the wooden sub-roof. An expert in the “art” of metal roof installation visited the Car Barn in February 2015 and we discussed organizing a 2- or 3-day training session with him sometime in spring 2016, which would give us the skills needed to replace this roof.

- Combination passenger car 47 – This car was our first acquisition and led to the formation of SPCRR. Preliminary work on the study phase of restoring this car is underway. A condition survey is one of the next steps.
• Pajaro Valley Railroad box car 215 – This car is missing truss rods and trucks and has siding which was soaked with oil, creating a fire hazard. A complete study phase and documentation package is needed as soon as possible so that the siding, which is flammable, can be removed and safety disposed of.

• Other cars – West Side flat car 222 used in operations needs to be lettered. The ends seats used when the flat cars were used in horse operations should be removed. The picnic benches used in two of the flat cars could be replaced with fixed seating.

At the General Meeting on December 12th, members will have the opportunity to discuss which projects should be given higher priorities. The summary list achieved then should not be considered a final document, but would act as a flexible document which can be modified when appropriate. But we can get back to work with some smaller projects that could be started within a few months and finished fairly easily. Come out to the Christmas dinner and General Meeting and join the discussion!

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**NC 253 Boxcar Study - continued from page 2**

documentation and restoration on this extremely important artifact. I intend to close as many gaps as possible so the Museum can make a good restoration decision fitting squarely within the Interpretative Master Plan guidelines (see Bruce MacGregor’s article in the November Hotbox). In doing so I have to be aware that the mysteries I encounter create a serious, but easy to fall into trap: jumping to conclusions. There are plenty of these traps surrounding NC 253, for example the following two:

1. We know the car was re-sided at least once in its life. It is easy to assume that the siding is not original 1874 lumber. However, is that valid? Could a cash-strapped line like the Nevada Central have decided to only replace the worst boards? Some of the car’s interior framing appears to be original lumber, why not also some of the siding?

2. Many narrow gauge boxcars had lumber doors—small doors on the ends to load long items. Because this was common and NC 253 has two lumber doors, it is likely that this car had a lumber door when it was built. However, is that valid? No photo prior to 1887 shows a lumber door on these cars—except until you realize the frustrating wrinkle that all photos until 1887 only show the brake wheel end of the boxcars. Did Carter provide a lumber door on the other, never seen end? Or did Carter omit them altogether for some reason?

I have many more questions like this and I am sure I will uncover even more as I do the research. Kevin Bunker and I had a conversation about avoiding this trap, out of which a “doubt first” mantra emerged for the project. What this means is we will focus on objectivity rather than assumptions to explain constructional oddities, gaps in history, or to define restoration options. This sounds like a given, but I think making it an open point is key to the credibility and success of this project.

To date I’ve just begun to consolidate on NC 253. I will present more on the study at the General Meeting and then in January, I will be spending a lot of time in the car measuring each component. From there I will be spending time digging into collections for any clues to the car’s history. With an open mind and a lot of passion I am ready to move forward on the study. I look forward to seeing you at the General Meeting on December 12th and telling you more about this historically important car.
Calendar Look Ahead
November/December/January

Nov 28 – Saturday Workday (cover some of the outdoor cars)

Dec 6 – Saturday Workday

Dec 6 & 7 (Sat & Sun) Ardenwood Christmas – Train operation will be handled by employees

Dec 12 (Sat) Holiday Dinner/General Meeting/Election/Special Presentation by historian David Eggleston
This will be a fun and informative meeting! A festive holiday dinner will be provided. Look for more info on page 1 (Note: no workday planned for Dec 12)

Dec 19 – Saturday Workday

Jan 2 – Saturday Workday

Directions For All 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).

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. 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. Once you enter the gate, proceed on the gravel road toward the left and park your vehicle at the Car Barn.