

trim on the bottom. A new door was made because it arrived in Chama without one.

The Mud Tunnel booth was in reasonably good condition. However, as usual, the bottom had rotted out so a new foundation and floor were constructed and installed. Half of the roof rafters were replaced and a new roof was put on. Both booths were given a primer coat of paint and a yellow final coat.

With the final placement of the Los Pinos and Mud Tunnel booths full restoration of all of the telegraphophone booths on the entire line is complete.

Project Status: Completed

OIL HOUSE BRICK POINTING

Project Objective: Remove deteriorated and damaged brick mortar from the oil house and replace it with fresh mortar.

Session: E

Team Leader: Colleen Wilson

This project was begun in 2004. An assessment of the mortar work done in 2004 indicated it was holding up very well with no problems detected.

A "recipe" was created for the mortar mix used on this project. It includes very fine screened cinder to give it a darker color when dried to blend in with the existing mortar. The same process that worked well in 2004 was continued in 2005. Old mortar that needs to be replaced is chiseled and scraped from between the bricks. Only deteriorated mortar is removed as necessary, leaving mortar that is still good. Cement caulk is applied where needed for deep damage repair prior to applying mortar over the top of it. New mortar is prepared and applied to newly cleaned areas. Excess mortar is best cleaned off with a wet sponge.

Substantial progress on pointing the oil house was made during this work session.

Project Status: Ongoing



Colleen Wilson, Mathew Eskender and Laura Eskender pointing brick on the Oil House.

SHORT REEFER 55

Project Objective: Continue complete exterior restoration of short reefer 55 to roadworthy condition.

Session: E

Team Leader: Randy Worwag

Work continued on reconstruction of the short reefer. Some materials ordered for the session did not arrive; alternate work was accomplished. Work consisted of repairing car siding in the area of the end sill grab irons, installing those grab irons, installing knuckle-pin lifter levers, running retainer pipe from triple valve to end sill, completing holes in car siding for stirrup steps, installing left side door latch, center hinges, and replacing incorrect fasteners on right side door.

The handbrake rod, chain roller, and brake staff stirrup were installed. The railroad shop cut a new key-way for the ratchet in the brake staff as the original one was not suitably located for use on a refrigerator car. The brake staff was temporarily installed on the car. It cannot be permanently located without the ice platforms in place. A replacement, temporary ice hatch cover was also fabricated.

The left and right side-sills and floor in the area of the side doors were in poor condition. The sills are an integral part of the car and would be very difficult to replace. An epoxy material, Liquid Wood, was used to fill

in portions of the sills and missing floor boards under the door thresholds. Large holes and missing wood were filled with a mixture of epoxy and sawdust and tamped into place. These areas are completely hidden after the thresholds are installed. Without good material under the thresholds, they cannot be securely fastened in place. After curing, the areas were sanded down level to accept the threshold plates. These areas and other areas on the car were primed with paint.

Project Status: Ongoing

CONVERT CAR 05635 TO CABOOSE

Project Objective: Complete rebuild to caboose for future revenue passenger service, especially charters and special trains

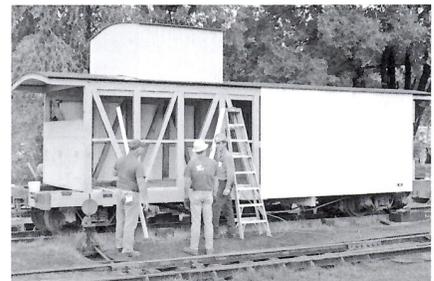
Sessions: C, D, E, and F

Team Leaders: Sessions C and D – Don Bayer and Bob Tully

Team Leader: Sessions E and F – Don Bayer



Caboose 05635 ready for siding.



Siding near completion on caboose 05635.

Following significant preparatory work in 2004, major progress was made in conversion of car 05635 to a caboose similar to the original D&RG cabooses of the 1920s, some of which were converted from boxcars.

The cupola was constructed. It will have two fixed windows in both the front and rear. The two windows on each side will open.

As this was an all-wood car, under today's rules it could not be operated within a steel frame car consist, but always had to be at the end of the train. To provide the railroad with much more flexibility in the use of the car the wooden center sills were replaced with two 4" x 6" rectangular high-grade steel beams. This will allow the car to be used within a steel car consist, not necessarily at the end of the train. Each beam was inserted through the slightly less than 5" x 8" holes in the cast steel bolsters, where spacers, shims, and blocks of steel were welded on top of each beam to prevent any lateral or horizontal movement. Steel cheek plates for coupler placement were fabricated and holes drilled to affix them to the new steel center sills. Brake rigging, air reservoir and other underside parts were reinstalled. Welding was accomplished by John Cole.

The rubber roofing, which protected much of the car last winter, was glued to the roof of the car and the cupola. Two by eight fir lumber was cut to length, ship lapped and nailed in place to form the sub-floor which will be covered with oak flooring. Each board had to be custom fit to the six sills to accommodate the center sill blocking, rivets, bolt heads and slight differences in sill heights.

Nearly all of the frame was covered with oil base primer as were all sides of the new siding. Three quarter inch thick, mostly clear T & G poplar siding was nailed in place on both sides. The window framing at three locations on each side was sided over

and the ends of the car as well as the ends of the cupola were temporarily covered with primed plywood. Other than the end sills and the sills in the end platform areas, all of which are primed, the car was enclosed for winter storage. Three 24 inch wide doors made with poplar, two ends and one internal, each with windows were stored for future installation. These doors were constructed in Colorado Springs by Roger Briggs between sessions.

Project Status: Ongoing; target year for completion is 2006, if possible, including leaf-spring trucks which will be constructed.

Editor's Note: *The conversion of car 05635 to a caboose is a unique and ambitious project for the Friends. The description above highlights major work that was done during the 2005 work sessions. A complete description of this project including the background leading to its initiation and*



Dave Sands watches as his grandson, D.J. Sands, tightens a U-bolt on the idler car.

additional details of the conversion process throughout the 2004 and 2005 work sessions will appear in the Spring issue of the Dispatch.

PIPE TRAIN IDLER CAR

Project Objective: Rebuild and make Flat Car 6746 serviceable and put into a Pipe Train

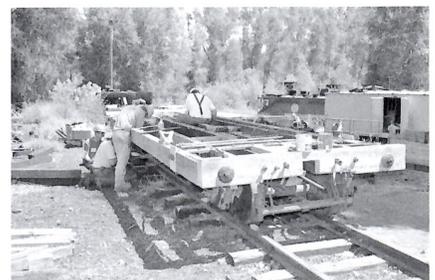
Sessions: C, D, E, F

Team Leader: Sessions C and D – Tony Kassin

Team Leader: Sessions E and F – Roy Blizzard, Jr.

Session C work on idler car 6746 started on Monday morning. The car was together but in very bad condition. The team of eight dismantled the deck, outside sills, one end sill, one coupler and one intermediate sill by noon. Disassembly continued through the week, with a lot of metal work. Bolsters were rusted together and many nuts had to be torched or cut off.

Work slowed during the week because the lumber required to start reconstruction was delayed. The team located some lumber and was able to replace one center sill. Teardown continued with removal of the trucks and disassembly of the bolsters. At this point the team had a car that did not look much like a car, held together with one center sill and a splice block on each end. Both bolsters were still attached but only the bottoms – the tops were off and the rigging was still



Pipe train idler car near ready for decking.

there along with the truss rods and the needle beams. It appeared that the needle beams may be the only original parts on this car when it is finally rebuilt. Everything else will have either come from another car or be new lumber. At the end of session C it was not even a real frame and it was pretty much apart.

The lumber arrived over the weekend between sessions C and D. The center sills were back in completely and one intermediate sill was back in by the end of session D.

During session E end sills and buffer blocks were fabricated and installed. Grab irons and short ladders were installed. Cosmetic side and end pieces were installed to accurately represent the historical cars. The car was raised and trucks were installed. The trucks were quite rusted and required a fair amount of TLC to create new bumper blocks and a thorough greasing of the contact surfaces.

Structurally, the needle beams were determined to need replacement so the team made new needle beams that were exact copies of the originals. The plumbing underneath the car was removed, the new needle beams were installed, and the plumbing was replaced.

The idler cars all use a piece of railroad track along the side of the car to give more stiffness to handle the heavy pipe loads. The crew successfully installed the stiffening track on both sides of the car. The car's exposed beams were sprayed with a 50/50 mixture of linseed oil and paint thinner to help preserve them.

In session F the stiffeners were reworked into the floor decking as on the other cars. The second intermediate sill, drive sills, and end sills were replaced. All hardware was reinstalled along with a new deck. A coat

of 50/50 mixture of boiled linseed oil and paint thinner was applied to all of the wood. The car is ready for painting and lettering. This car is a complete rebuild with all new wood and some new metal.

Project Status: Completed

MISCELLANEOUS REPAIRS

Project Objective: Minor repairs to rolling stock including rebuilding boxcar doors and other miscellaneous repairs.

Team Leader: Sessions D and E – Geof Gordon

During session D a side door that was already in progress for boxcar 3592 was completed. This door



The miscellaneous repairs team sets ties on the scale in preparation for temporarily covering the pit.



Dan Robbins and John Ruhr working on sill of car 3553.

followed the original style frameless door of 1903 when the 3000 series were constructed. The only steel on the edges is a runner on the door bottom. One door from “cook car” 3483 was also rebuilt. Boxcar doors for the 3000 series are found in both steel framed and frameless configuration as not all were rebuilt during the 1926 rebuild of 750 cars.

Because several people could not attend, three small teams were combined under Geof Gordon for session E, bringing the miscellaneous team to a total of six. The door completed during session D was hung on boxcar 3592. A new door was also built and hung on the opposite side of this car. Outside screens were installed on bunk car 04407. A leak in the Friends paint car was repaired.

As a temporary safety measure the open scale house pit was covered with plywood, nailed to ties placed on the scale frame work. A mixture of linseed oil and paint thinner was applied to the walkway and hand rails of the Chama bridge.

Old linoleum in the night watchman's house bathroom was removed, the floor was leveled as much as possible, and new linoleum installed. The kitchen counter was also recovered. The bunk room closet was rebuilt to provide additional space within the room. Several boards that had become tripping hazards were replaced on the Chama depot deck. A door was relocated in the Docents/Chroniclers office to reduce noise in the railroad's ticket and reservation office.

Team Leader Geof Gordon spent Wednesday in Antonito helping move materials and tools from Fort Knox into the new Antonito CRF.

Project Status: Complete

BOXCAR 3553

Project Objective: Reconvert one of the early 1970 concession cars, 451, to its original 1926 configuration as 30 foot, 25 ton, Class 8 boxcar 3553 for museum display.

Sessions: C, D, E and F

Team Leader: Sessions C and D – John Eng

Team Leader: Sessions E and F – Mike Wissler

This car was one of 22 rebuilt in the early 1970's by the C&TSRR for passenger service. When re-conversion is completed the boxcar will be used as a traveling museum and interpretative display car, available for special events in Chama, Cumbres, Osier and Antonito, and perhaps on the line on some special charter freight car consists.

Initial work had begun on the car in 2004. In 2005, Session B began removal of hardware. Session C completed removal of hardware. A



Bob Lenicheck and Wendell Schweitzer setting roof ribs on car 3553.



Jim McGee, Michael Camara, and Bob Michel strap down pipe in the display gondola.

major task was removal of the Murphy roof. The team documented its methods for removal. Upper sills had significant water damage and new sills were fabricated. Lower sills also required replacement due to water damage, primarily resulting from water leakage at the windows that were installed when the boxcar was converted to a concession car. Several panels of the Murphy roof also need to be replaced due to rust. Replacement parts are available.

Session D work included installation of the upper and lower sills along with vertical and angled tie rods on one wall and installation of the lower sill, vertical members, and tie rods on the other wall. The second upper sill was ready to install. Four sidewall vertical posts and four door points were fabricated from scratch. All vertical tie rods were cut and threaded and angled tie rods were welded together from old rods and threaded.

The Session E and F teams fabricated and installed new end sills. Framing of both walls was completed. As many diagonal truss rod castings as possible were salvaged. New diagonal truss rods were fabricated as needed and truss rod installation was completed. Roof rafters were installed. Wall studs, truss rods, and end rafters were installed on both ends. The belt line was installed around the car using some old pieces and fabricating some new pieces. Installation of the wood roof and exterior end siding was

completed. Floor planking and exterior side siding was started.

A new needle beam was fabricated and installed. Brake hangers were installed on the end sills. The mechanical brake and brake pipe were installed. Several repairs were made to the brakes, including a new tee for the conductor's air gauge, replacement of a bad section of pipe, and a brake hose. The retainer valve was installed and the brakes were tested. A few deficiencies were noted and corrected. Couplers were installed.

Project Status: Ongoing

PIPE TRAIN LOAD

Project Objective: Fabricate and install a dummy pipe load on two gondola cars.

Session: F

Team Leader: Jim McGee

Pipe gondola 1557 was loaded. Four 4x6 blocks were used full width on the floor to support the load. The pipe was loaded with a fork lift and laid in the car in a pyramid with six pipes on the bottom. The pipe was banded together in four places. Three chains were also put around the pipe and anchored to the floor. For security reasons, the chain was bolted to the top pipe with counter sunk allen head bolts held with Lock-Tite. The "S" hooks were welded together on the bottom and the chain also was welded together in two places.