

Project 1080 – Restore Stock Car #5995

Objective: Continue the rebuild of Stock Car #5995.

Team Leader, Session A & G: Dan Pyzel

Team Members, Session A: Kevin Corwin & Mike Horner

Work Accomplished: During Session A, we replaced the burned out section of the side sill on the South side of the car. We made and installed extensions for the two vertical body rods in each end of the car which help support the coupler pockets. We finished preparation and installation of the second body bolster under the A end of the car. We raised and leveled the car to facilitate installation of underbody fixtures. We finished modifications to the eight queen posts and installed them.



Kevin Corwin and TL Dan Pyzel work on removing a rusty bolt.



The splice in the side sill is perfect! You just can't get a better fit.

During Session G, we plan to fabricate and install the two outer truss rods, fabricate and install shims between the bottom of the center sills and the tops of the center plates to forestall any rocking motion of the center plates, and continue working on the draft gear in preparation for installing the couplers. Once the outer truss rods are in place, the car will be ready to be placed on trucks.

Session G: Repaired all 4 truss rods, installing two. Repaired and installed 2 sets of draft gear and began installation of brake gear supports. Car may be ready for trucks in 2014, which have to come from Chama, although suitable trucks have been identified.

Project Status: () Completed () Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

Project 1089 – Repairs to Sheep Car #5633

Original Objective: Restore stock cars to operable condition, replace roofs, install metal roofs, replace missing parts, and start major overhaul on worst (non-operable) car. Inspect cars during Session A in 2013. Place worst car in tent in swamp and 2 cars that are closest to operable on track leading to tent. Repair roofs on 2 cars, install metal roof on 1 car, and disassemble and evaluate worst car during Session D.

Revised Objective: Make temporary repairs to 3 stock cars (5841, 5691, & 5553) to allow use in fall 2013 photo freight train. Repairs consist of attaching loose materials and doors, replacing some roof materials, and tightening or replacing grab irons, steps, and other safety appliances. Limited painting of repaired fixtures was also undertaken.

Team Leader, Session D: Scott Hardy

Team Members, Session D: George Detwiler, & Bill Lock

Work Accomplished: Car 5553: Tightened grab irons and stirrup steps, built new door, attached second door so it wouldn't fall off, removed loose roof walk wood, and reattached some side boards.

Cars 5691 and 5841: Removed loose roof walk boards, replaced some roofing boards and secured roof grab irons. Secured doors, tightened grab irons and stirrup steps, and replaced missing grab irons. Replaced some wooden door members.



Some roofing boards were removed and replaced to secure the roof grab iron.



New door built, hung, primed and painted.

Project Status: Completed

Project 1099 – Car Storage Facility - Antonito

Objective: Complete frame and get ready to install roofing. Three items; one, relocate eight pole foundations that are out of position. Next, complete horizontal diagonal bracing and replace several defective (4?) members. Next, complete installation of purlins, about 50.

Team Leader, Session's A, B & G: Russ Hanscom

Team Leader, Session's C & D: Jim Florey

Team Member's Session A: Fuzzy Anstine, Don Bayer, John Engs, Jack Heiermann, Bob McCain & Jim McGee

Team Member's Session B: John Engs, Sam Hauck & Jack Heiermann

Team Member's Session C: Fuzzy Anstine, Ron Carder, Fred Kuhns, Emmanuel Lopez, Chris Norcross, Ted Norcross, Tarry Rahne, Warren Ringer, David Randolph & Cletus Wander

Team Member's Session D: (Monday & Tuesday only) Fred Kuhns, Emmanuel Lopez, Chris Norcross, Ted Norcross, Michael O'Nele & Mick O'Nele (Monday only) Cletus Wander.

Team Member's Session G: Jim McGee, Chuck Dueker, Marshall Smith and Bob McCain

Work accomplished in Session's A & B: The work we hoped to accomplish was:

- 1) Install remaining 53 purlins (50 installed in 2012)
- 2) Install 32 purlin to knee brace ties
- 3) Install remaining diagonal braces, about six
- 4) Install pipe to base plate gussets on 32 pole bases
- 5) Finish and tighten the vertical X braces between poles
- 6) Realign several crooked truss to pole top bolted connections.
- 7) Relocate eight mislocated pole foundations

Foundation relocation: The foundations are buried four feet deep; there is a 30" square pad at the bottom inside a blue plastic form. Eight foundations in the southwest corner needed to be moved 8" to the east as they were 8" too far from the others.

Using the backhoe, the east side of the foundation was be excavated down to the bottom of the square foot. Dirt adjacent to the column was be caved into the hole so the backhoe could remove it. Once the square foot was exposed, the column was raised slightly, less than 1", and moved sideways with a come-a-long from the next foundation.



TL Russ Hanscom gives directions to back-hoe operator Fuzzy Anstine.



TL Russ Hanscom removing dirt at the base of the column.

Raising the pole and foundation was done with a hydraulic jack placed under the truss at the first node from the pole, the node where the knee brace ends. The jack was set on the track ties with a section of 3" pipe to connect to the truss. The 3" pipe had a flat plate with a ring to locate the jack ram at the bottom and a U at the top to straddle the bottom truss member; the top of the U was drilled for a safety pin so the pipe could not fall if it got loose. The pipe was put into place using a rope and pulley attached to the truss.

With the Friends backhoe this activity was completed in just over one working day, it went quicker than anticipated with no problems.

Purlin Installation

About 53 purlins remained to be installed. Access to the northwest corner of the structure was blocked by a large dirt pile and access to the southeast corner was blocked by a stock car and the storage refer. Fortunately, the equipment rental center was not able to supply the man lifts we requested and an 80' reach unit was substituted for one. That worked out great as it could park outside the obstructions and reach all of the way in. It also had enough lifting capacity so that we could use it to lift and set the purlins, which weighed roughly 100# each. The other lift had both in/out and up/down motions so it could go in under the trusses then pop up through the bracing; we could not get the lifts inside the barn as the RR had already filled it with cars and the ballast was too soft for the lifts to travel. We managed to get to all but two joints with the lifts; for the last two we put an extension ladder on a car and went up that way.

It took four days to get the purlins installed with two crews of two working most of the time.



Purlins being installed by two different 2 man crews.

Vertical X Bracing

Most of the tie rods making up the vertical bracing were a bit too long so we took them down, one set at a time, and shortened them about 3", then reinstalled and tightened them. This took about a half day.

Purlin to Knee Tie

Each of the knee braces needed a mid-point restraint so the brace could not shift sideways when under compression. The restraints were 6'8" long pieces of 1 1/4 x 1 1/4 x 1/8" angle run at approximately a 45 degree angle from the bend in the knee brace to the purlin above. The ends of the angle were drilled for 1/2" bolts. The purlin was drilled near mid span; the connection to the knee brace was made by drilling a hole for a 1/2" bolt near the joint.

Using two man lifts, this activity took about one day. At the same time, missing bolts at the center of the horizontal X bracing between trusses were installed.

Base Plate Gussets

As a result of one or more questionable welds between the pole base plate and supporting pipe post, it was decided to install gussets on all such joints. At three gussets per base plate, 96 gussets were cut and welded in place, not an easy task as all of the welding was uphill or overhead positions. This required two days.



TL Russ Hanscom clamping piece in place to make sure gussets are in correct place and lined up for welding.



TL Russ Hanscom welding gussets in less than ideal conditions.

Additional

One knee brace was repaired.

Overall we accomplished all of the intended work with the exception of straightening several crooked truss to pole top connections.

While installing purlins, we had a good view of the roof line and it was determined that there is a curve along the length of the building; several horizontal X brace sets and some knee braces will have to be temporarily removed to allow the sections of the roof to move relative to each other. A day or so will be required to complete this work, we ran out of time in session B.

A different crew will be present during Sessions C&D; they will attempt to install the roofing, wind permitting.

Work accomplished in Session's C & D: Monday, June 17 – cut 1” off of #8 telephone pole support at the bottom next to CRF side. Straightened building roof line as best we could. Removed tie braces/bolts at telephone poles and welded steel supports back in place. Crew all helped prepare structure for roof panel installation.

Tuesday, June 18 – Laid out roof on one side and started installing roof panels. 2 crew members on ground supporting the job.

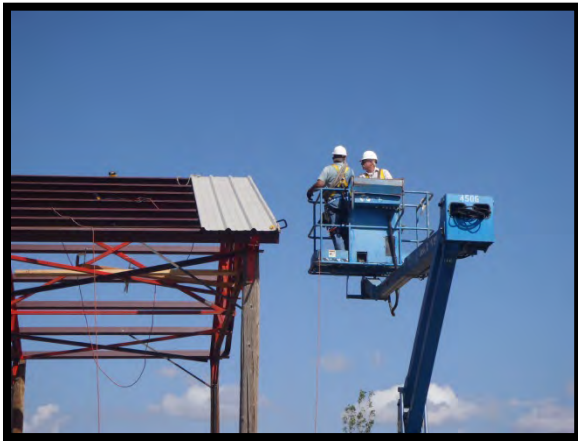


Platform made by Friends members to keep the roof sheathing panels from bending.



Platform in operation – worked like a charm!

Wednesday, June 19th – Installed roof panels on one-half of one side. Finished 32 panels. 3 people on top of the roof and 2 other people screwing panels together. Crew on the ground – one operating the forklift and one to handle the panels on the ground.



First roof panel installed.



Second roof panel being lifted into place.

Thursday, June 20th – Finished installing roof panels on one side – 36 panels. 4 people on the top of the roof installing roof panels. 2 other people screwing panels together.

Friday, June 21st – Crew started installing panels on the second side. Had to shim purlins bottom to make side even.



Another sheet being lifted up to the roof.



Screwing another roof panel into place.

Monday, June 24th – Tightened all braces and stabilizer cross rods and ground wires. Installed all roofing, 24 sheets at 10:20 a.m. Checked all fasteners and tightened as necessary. Cut one track rail 13' 8 ³/₄ " for signage at Osier.



Finished roof.

Tuesday, June 25th – Crew installed ridge caps and finished checking and tightening all structure hardware. Cut one track rail for signage mounting 11' 11" at Osier.

Wednesday, June 26th – Crew cutting track rail for signage mounting at Osier.

Thursday, June 27th – Crew cutting track rail in assorted sizes for signage mounting at Osier. 15 done – job completed. Crew unloaded wood to be used on Project 1162 during Session D.

Friday – Drilled out broken bolts in roller blocks on drop bottom gondola #783. (Project 1162 during Session D.)

Session G:

Jim McGee and Chuck Dueker installed the gable end on the east end.

There was a lot of cutting and fitting involved so it went a bit slower than anticipated but the final product is square and sound. Using the man lift they took down the Friends sign on the West end of the CRF so it could be repainted over the winter. Marshall Smith and Bob McCain welded on some knee braces that had been disconnected.

Project Status: Roof Completed.

Project 1099 – Install Electrical Circuits to Car Storage Facility - Antonito

Objective:

Team Leader, Session G:

Team Members, Session G:

Work Accomplished:

Project Status:

Project 1113 – Rebuild Gondola Car 9558 - Chama

Objective: Finish the rebuild of gondola car 9558.

Team Leader, Session E: Bill Pratt

Team Members, Session E: Wayne Klatt, John Soos, John Sutkus, and Warren Ringer. Note - John Soos and John Sutkus were originally assigned to the Coal Tipple project, but were reassigned to this project.

Work Accomplished: The last three boards on each side, all end boards, all metal corner brackets, and all four metal side braces were installed. This finished the basic body structure.

All grab irons and all B end brake system components were then installed.

What additional work is required? The car is finished, and no additional work is required, except that it is missing the B end coupler knuckle (Simplex coupler).

Comments: This car is finished except for the missing coupler knuckle, as mentioned above.

This car was restored to its original configuration of a closed end gondola, rather than as a pipe gondola. All parts required for this conversion were cannibalized from Hi Side Gondola 1000.

All brake linkage was removed, so I recommend a complete brake test and adjustment be performed.

The Coal Tipple crew was a great help, and we would not have finished the car this session without them.

The Railroad spotting our parts storage car adjacent to our project was a great help and saved much time.



Warren Ringer drilling a hole for another bolt while John Sutkus tightens a nut.



Finished car, ready to be primed, painted and lettered.

Project Status: Car needs to be primed, painted and lettered.

Job 1115 – Tourist Sleeper Coach Restoration Car 0252 – Colorado Springs

Objective: The Friends of the Cumbres and Toltec Scenic Railroad acquired Car Body 0252 in 1994 and moved it to the railroad yard in Chama, New Mexico where it was cocooned awaiting restoration. In August of 2009 the car body was moved to the Friends Colorado Springs Restoration site where it now sits undergoing a projected 6 to 7 year restoration process. The Friends goal is to restore Car 0252 to its original condition as Car 470 as it was delivered to the D&RG from Pullman Palace Car Company at the Detroit facility where the car was manufactured in late 1889.

Team Leader: John Engs and Tom Simco

Team Members: Thirteen individuals throughout the year September 1, 2012 through August 31, 2013 which totaled 835 hours of work on the project which does not include off-site work.

Work Accomplished: Even though the car structurally was in very good condition considering its age it is still 100% wood. In order to return this type of car to revenue service it must meet current day standards for structural integrity. To accomplish this has been a challenge to say the least. First is coming up with a design which took several months and finally coming up with a design that could be proven using computer analyses. The team is fortunate to have a couple of engineers on our team who walked us through the process; it was like having a class in metallography. In late 2012 we finally had what is believed to be a sound design. This involved the use of 4X6 steel angle with the long angle up in a 3/8"



thickness. Since the angle came in 20' sections a splice would be necessary to join the two sections together. Two methods of attachment were necessary, with the possibility of stress fractures where constant movement is in play. To form this splice, a second piece of steel angle was laid over the joint with a two foot lap over each of the two ends. A four bolt pattern was installed on each lap with high tensile strength bolts and nuts installed. In addition all points along the laps, inside and out, were welded in a double weld. Every three feet along the length of steel a 3/4" high tensile strength bolt was passed through one angle then through a steel separator, schedule 80 seamless 1" pipe, then through the other angle. Tightening of the bolt compresses both angles together against the separator holding the steel rigid without pressure applied to the wood center sills. When the angle was in place it was time to install the wood spacers which keep the sills separated. Each was custom cut to length, normally on a wood car they are mortised into each sill. To hold the spacers in place against the steel, a metal saddle bracket was designed and cut to fit. Each bracket was then welded to the steel angle. This holds the spacer in

position, to keep it from pushing up a through bolt is used. The installation of the center sill angle and bracketing for the sill spacers was finally completed in May 2013.



The next major effort is the steel element for each end of the car. This is a complex design to structurally support the car if it were to roll. The design consists of a $\frac{1}{4}$ " plate as a header over the door to both sides of the car. This plate will be sandwiched between the upper oak end sill and exterior sheathings. The upper plate is attached to X bracing $\frac{1}{4}$ " x 3" on each side of the doorway that is in turn attached to the $\frac{3}{8}$ " angle mounted to the end sill. To obtain the proper fit the bracing must be welded while in place. The picture above left shows the bracing being fit into position on the car. In September 2013 work sessions we plan to complete the welding of X bracing on both ends.

In addition to the steel work we have been busy fitting the west end cantilevered sills for the end platform. All of these sills are laminated white oak and were manufactured by Craig McMullen. When these center sills are installed there will be two additional $\frac{1}{2}$ " steel angles that wrap the center sill extensions. You can see the spacing for the steel around the center sills in the photo above right. The spacing blocks between the sills are mortised joints. The outside sills are not cantilevered as the stairs pass through that area on each side of the car.



Summary: This project requires intense work effort and a precise design. The best statement of outcome is the construction providing structural integrity meeting the current FRA standards but from the customers eye not seeing any noticeable difference in the original exterior appearance. It is also worthy to note that with the appointment to National Landmark status, Car 0252 became an accredited asset and is now listed on both the state and federal historic registries. With several years remaining before completion of this restoration, we continue to have great expectations.

Project Status - Not Completed: By the end of 2013 a majority of the steel work will have been completed. A future challenge will be the installation of the steel Bolster plates and the cantilevered sills for the platforms on both ends; next is the installation of the needle-beams. We plan by the end of 2014 that the siding will have been completed. Scheduled for an additional three years this project is progressing satisfactorily.

Project 1117 – Install Car Storage Facility Tracks - Antonito

Objective: Line track 1. Raise and line tracks 2 & 3. Add needed ballast.
Design and build unloading ramp on east end of track 2

Team Leader, Session A: Don Bayer

Team Members, Session A:

Work Accomplished: No work done on this project because the tracks under the CSF were not empty.

Project Status: ☐ Completed ☐ Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

Project 1118 – Frameless Tank Cars Restoration

Objective: Continue with ongoing project to restore UTLX frameless tank cars #11036 & 11037 in Antonito.

Team Leader, Session D & F: Chris Trunk

Team Members, Session D: Bill Kepner, Chase Kepner & Randy Worwag.

Team Members, Session F: Bill McCall & Warren Ringer.

Work Accomplished: No team leader report received.

Hi Ed,

I think the following picture sums up the week.



The happy crew at the end of a successful week. Both Gramps cars now have couplers and are riding at their correct height above the trucks.

Right after this, the rains came but we didn't care. And we had more visitors - John Engs and Bob Ross arrived just after we finished the work and were getting ready to clean up so they got to see the results of a very productive week. btw, Chris Trunk is a very competent Gradall operator. He did a masterful job of inserting the couplers into the car and of lifting the car. This permitted moving the truck in and out so the new bolster cups could be inserted. A whole lot faster and easier than jacking. Clyde used the same procedure in Chama with one of the narrow frame tank cars last week.

Warren

Project Status: () Completed () Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

2013 Progress Report – Project 1118 – Restore Frameless Tank Cars – Antonito

Significant work was accomplished in 2013 with the assembly and installation of the couplers and draft gear for both 11036 & 11037 UTLX Frameless Tank Cars.

The June session “D” work crew consisted of Bill & Chase Kepner, Randy Worwag, and myself. We cribbed-up one end of car 11037. The coupler and yoke assembly was moved from the storage location using the Kubota, and the draft gear assembly was installed into the yoke. A steel follower plate was fabricated from 2” thick steel plate and milled to correct thickness using the milling machine in the CRF that was recently donated to the Friends. The follower plate was installed between the draft gear and coupler butt.



This view shows the coupler and draft gear fully assembled and ready for installation.

The entire assembly was then moved using the large Gradall pallet lifter that was in Antonito for the Car Barn roofing project. Using the Gradall, the assembly was shifted under the coupler pocket and lifted up into position. Alterations were made to the follower plate to allow the assembly to fit the pocket so that the gear is fitted snug without any slop. Once in position, the assembly was held in place with a carry iron under the yoke, and a carry pin under the coupler shank. The retaining components were also fabricated by the team using the metal working equipment in the CRF.



This view shows 11036 cribbed-up during session F in August. The coupler pocket is exposed and ready for the draft gear to be fitted-up from beneath the pocket. The 11037 is in the background with the coupler that was installed in June.



In this view the draft gear and coupler are fitted-up and the car is being readied to be lowered back onto the truck.

Work continued in June on the opposite end of 11037, and by the end of the week the car was completed. The cars were then rearranged so that 11036 was placed on the south CRF lead, and 11037 moved over to the north lead. Both cars were shifted using the Kubota.

In August during work session "F" work resumed on the project. The team consisted of Hardy Cruse, Bill McCall, Warren Ringer, and me. Car 11036 was similarly cribbed-up and fitted with the couplers and draft gear. The team was able to put the metal working equipment in the CRF to good use fabricating the follower plates and carry irons needed for the installation. Work was also started on the fabrication of the cut levers and related brackets, and also the bolster beam wood spacers that are fitted below the spring assemblies. Some minor repairs were made to the walkway angle irons, and bolster bowl spacers were installed to put the tanks at the correct elevation with respect to the trucks.



View of both tank cars at the end of session F with couplers and draft gear installed.

Work will continue in 2014 to finish fabricating and installing the cut levers needed for uncoupling. Also work will be started on installing the brake cylinders and brake rigging underneath the tanks. Hopefully this work can be accomplished inside the CRF.

Respectfully submitted,

Chris Trunk Team Leader – Project 1118

Project 1122 – Repair Box Car #3669

Objective: Repair roof walk, fascia boards, doors, siding etc.

Team Leader, Session E: Rob Lenicheck

Team Members, Session E: Joe Kanocz & Bob McCain

Team Members, Session F: David Walter & Michael Walter

Work Accomplished:

The team accomplished the following on this project during session E:

1. The team found one quarter of the car needing to have the siding replaced to match the other three quarters of the car.
2. The ends of the car were deemed still acceptable at this point in time. They will need to be replaced at some point in the future, probably in about 5 yrs or so.
3. No work was done on the roof or roof walk.
4. The team ripped off the old siding and the upper fascia strip.
5. The door, door hardware, grab irons and all other hardware, in as much as possible, were removed prior to the work.
6. Some structural members inside the car which supported the siding were loose and were subsequently secured. Original wood was used if possible.
7. The new siding was primed, inside and out, prior to installation.
8. The new siding was installed, including the section below the door.
9. All hardware was replaced and completely attached using the proper bolts. Long bolts were cut off. The bolts were not peened over because of possible end work within a few years.
10. At this point the car would survive the winter. I requested that the car be painted, including the roof, during Session F.

Joe and Bob were a great team to work with. We accomplished our goal of completing the quarter of the car.

Submitted by Rob Lenicheck

Bob McCain (on ladder) and Joe Kanocz at work: (next page)



Project Status: Completed: The car was completed, provided that the painting of the car took place in Session F. The car will still need to be lettered. A reassessment of the condition of the ends of the car needs to be done in about 5 years.

Project 1153 – Chama Stock Pen Fence

Objective: Construct three gates for the stock pens and prepare materials for use in later 2013 sessions. Construct gates at the carpentry shop as time permits while overseeing the operations in the shop and performing miscellaneous carpentry projects as assigned. Restore deteriorated divider fence at south end of stock pen. Build and install three gates. Round up tools needed and load in pickup along with generator for transport to work site. Move materials from yard area to work site using tractor and trailer if necessary. Remove old fencing and establish line for new fence, marking post locations with stakes. Two team members to dig postholes using backhoe and four team members to set posts and then begin adding rails along with assisting to install gate opening posts as needed. Ask Marshall Smith to work on gate hardware. Round up tools and equipment. Finish Session C work not completed. Prepare holes in gateposts for hinges if not already completed. Set gates. Finish hardware installation. Cleaned up site.

Team Leader, Session C, D, E & F: Len Jones

Team Members, Session C: George Detwiler, Walt Duncan, Bob Hewitt & Charles Joerg

Team Members, Session D: Larry Ferrell & Bob Hewitt

Team Members, Session F: Jace Drennan, Daniel D. McGunegle & Daniel E. McGunegle

Work Accomplished: Set 10 fence posts and added fence rails to all but the two ends. Set 6 gate-opening posts in concrete and braced to hold in place until concrete cures.

WORK REMAINING: Cut gate-opening posts to correct height, add headers to all three openings, mount gates after installing hardware and complete fence by adding rails between fence ends and gate-posts. Fifty to 100 man-hours needed to complete.

Project (# unknown) Chama Yard Cleanup

Spent approximate one cumulative day picking up trash from project sites and sprucing up Friends' work area.



Gate in the process of falling down – old gate will be removed and new gate installed in either Session E or F.



TL & team installing a portion of fence.



Gate post set and will be backfilled in Session E.



Interior fence and gate posts at the end of Session D.

Session F:

Cut gate opening posts to length, installed two gates with hardware and completed fence, stored left over materials and cleaned up work site.



Project at the end of Session F.

Project Status: Work needed to complete: Add latches to the two gates that have been installed and hang third gate complete with hardware. Add fence rails in short (3" to 5"?) section between fence end and gate post.

Other work performed: Project 801: Steps for Friends' boxcars -WORK COMPLETED
Built and placed five (5) more sets of steps including the Nail & Bolt car.

Project 1005: Plan Car Inspectors House Reconstruction. Spent one half day helping Bob Cory at Cumbres close in one side of the house to protect against weather for the winter.

Project 1154 – Snow Shed Header Replacement

Objective: When our team worked on the snow shed last summer we replaced a damaged 8"X12" header on the fourth bent. While we were installing galvanized tin on the top of the first 6 headers to deflect water and to prevent rot, we discovered that the #2 bent header was in need of replacement as well.

The goal of this summer is to replace the second bent header, and to inspect all of the remaining 8 headers to access their condition and if they are OK we will apply a galvanized tin 'roof' on them to prevent water runoff rot damaged. We will replace as many as 12 of the 2"x12" diagonal brace boards as needed while we are there. Having replaced a header last summer we should be able to setup and work much faster this time as we know just what tools and equipment and tools we will need to do the job. We will start by getting into our climbing safety harness and installing anchors for their lanyards on top of the roof. After tying off and removing the 2X12's directly above the header and installing our steel temporary header to support the roof, we will cut all the nails and diagonal braces from the header itself. At this time we will attach the electric winch cables around the header and slowly lower the old header to the ground. One final measurement of the old header will be made and the new replacement header will be cut to the correct length.

At this time we will winch the new header into place and install the re-bar anchor pins between the header and their support poles. The 4x6 rafters that support the roof will be nailed on the new header and the galvanized steel sheet will be installed at this time to act as a roof to protect the new wood. We will then pull boards off the top of the remaining 8 headers and inspect them before installing tin on top of them as well.

Team Leader, Session E: John Cole

Team Members, Session E: Thomas Hindman, Herbert Knoesel & Tarry Rahne

Work Accomplished: We got 2- 8"X12"X 20' headers and 10-2"X12" side brace boards for this summer's work. Ed Lowrance got us 30d spiral shank nails to nail brace boards and did they work great. We started in on pulling up the 2x12" roof boards above the #2 header and installed our steel temporary header to support the weight of the roof while we replaced the wooden header. Once we got the roof jacked up and the header in place, we started to cut the nails and rebar pins holding the header to the structure. With that job completed, we were able to lift the old header up with the 2 electric winches, and then lower the header to the floor of the snow shed. Ron Horejsi then cut the header up into sizes that the landscape folks in Chama could use and then trimmed the new header to the correct length we needed for our job. We then lifted the new header up about 19' to the top of the support poles and placed and adjusted the new header into position. Once in place we ran an auger to put a 2' length of rebar to pin the new header into the support poles. Once finished with that job we then lowered the weight of the snow shed onto the new header and removed the steel temporary header. We then installed the new side brace boards between the header and the side poles. Completing that job we put a tin 'roof' onto the header and rafters sitting on it to protect the wood from rain and snow water that caused the old wood to rot. We used a roofing nail gun to install wide head roofing nails to hold the tin in

place and coated the nail heads with roof tar to make the installation water tight. From there we put the 2X12s roof back on the snow shed and installed the 1X4' battens to seal the gap between the boards.

We then proceeded to pull the roof off and uncover all of the headers in the snow shed that we didn't put tin on last summer (9), and did a condition inspection as well as covering all of them with tin to protect against rot. All of the remaining headers are in good condition and should last for many more years, but some of the wood on the east side of the structure about half way down the length is damaged and should be replaced.

On Thursday afternoon, 3 of our team went over to the outbuildings on the car man's house to assist Dave Ferro in replacing the roof on 3 sections that had blown off during the winter. Finishing that we took what roll roofing scraps we had left and replaced half of the roof on the coal bunker that had blown off over by the Cumbres Pass section house. We only had enough green roofing for the side facing the tracks, and had to use RED on half of the other side. Even though one side is quite 'colorful', it will at least shed water and protect the building.



Steel supports being put in place.



New angle supports installed.

Project Status: Completed

I am quite proud of the great job my guys did as we finished much more than we set out to do and everything looks great. I am looking forward to working with them again next summer.

Job 1160 – Antonito Display Loco Painting, Osier Station Painting, Rider Gondola 6205

Objective: To paint the display locomotive in Antonito, CO. Locomotive 494 a K-37 2-8-2, Paint Osier Station, Paint Rider Gondola 6205.

Team Leader B: Don Stewart

Team Members Session B: Lance Godfrey, Jill Stewart, Bob Rosenberger, Judy Rosenberger



Session D Antonito Display Locomotive 494 Painting Team was: Lance Godfrey, Judy Rosenberger, Bob Rosenberger, Jill Stewart and TL Don Stewart.

Summary of Work on Job 1160 Accomplished:

Locomotive 494 was painted with primer and black oil paint. The silver paint could not be located in the Antonito engine house where it was stored two years ago. Thus the smoke box, firebox and silver trim was not painted. We also ran out of time to paint the trim. This will be completed in Session F.

The Osier Station was painted after removing the signs and masking off the doorknobs and decks. The signs will be replaced and some touch-up of the painted window panes will be completed in Session F.

The Rider Gondola that was rebuilt in Sessions A, B, and C was painted in Session D. This task is complete.

Locomotive 494, Antonito Display Engine was scraped and wire brushed to remove old paint first day of the work session. This locomotive was scraped and cleaned two years ago.



The engine was then primed with a Railroad furnished oil based primer on Tuesday. Five gallons of the primer was used to cover the boiler, frame, cab, and tender. After drying overnight the primer was covered with a coat of the Railroad furnished gloss black oil paint. The stored 5 gallon can of silver paint could not be located, but two used cans of silver paint were found. They were not useable (resin separated from pigment). The silver trim will be painted in Session F in August.



Display locomotive 494 has been painted black. The silver trim will be painted in August.

Osier Station was scraped and wire brushed to remove some old paint on Tuesday. Old swallow nests were knocked down as well. The sign on the south side needs repair. It appears to be Vinyl lettering on a painted pressboard backing. The sign on the rear of the station also needs repair. The North side and front are OK.



The station was masked off (doorknobs, decks and railings) then primed with oil based primer on Thursday morning. Five gallons of primer were used for this. The station's final coat of oil based dark brown paint was added on Friday morning. The black window panes will be touched up in Session F.

Note that the oil based finish coat did not adhere well in the cracks to the primer. See the photo below. This is the second coat of paint. I suggest another coat of Latex paint to fill the cracks in the paint. This can be done in the F Work Session.





The station as finished at the end of Work Session D.

Rider Gondola 6205 was scraped and wire brushed to remove old paint and rough wood Monday, June 24, 2013. The car had been rebuild in Work Sessions A and B. Primer was applied on Monday.



The gondola was sprayed with watery soot on Tuesday morning by the scheduled train as it left Chama. The soot was not able to be removed from the primed car. Two coats of Babbit Brown

(D&RGW Freight Car Red) were applied Tuesday afternoon after as much soot as possible could be removed. About 8 gallons of paint were used as the car interior was also painted.



Rider Gondola 6205 has been completed and is ready for lettering and the Cinder Bear Train.

Recommendations: Multiple large projects (paint a loco, and a station) in different remote locations (Antonito and Osier) are difficult to complete in one week. Neither were completed during Session D. They will be completed in Session F.

Paint all wood structures with oil primer and latex paint. New wood such as siding and decks should be stained before installing to preserve the wood.

Future Work Sessions

- Paint silver trim on locomotive 494 on display in Antonito, CO
- Paint window panes and re-hang signs on the Osier Depot
- Paint Long Reefer 163 once siding has been replaced
- Paint the new Tool Car being rebuilt during sessions C and D.
- Paint High Side Gondola 1232
-
- I also suggest the decks and railings be stained with an oil based stain. This was discussed with Ted Norcross and we are in agreement that the decks in front and rear of the station, including the railings, be stained a dark brown color to preserve the wood.

Project Status: Mostly complete on the display locomotive and Osier Station. Complete on the Rider Gondola.

NOTE: See team leader report for Project 0720 to see the finished paint job on the Antonito display engine and Osier Depot that was painted in Session F.

Project 1162 - Rebuild Drop Bottom Gondola #783

Objective: Continue rebuild of DBG 783

Team Leader, Session D: Bill Pratt

Team Members, Session D: Lee Parks, Randy Parks, Warren Ringer, Bob Osborn, and Ron Senek

Work Accomplished: All crossbeam mounting holes were die checked for cracks, and both bolster top saddle pieces were removed. The sandblasted frame and frame crossbeams were coated with red oxide primer, and the severely rusted top edge of the A end end sill was cut off and a new piece of angle iron was fitted for welding (to be welded later). All truss rods were cleaned and inspected, all damaged and excessively worn areas were repaired by welding, and all damaged threads were chased with a thread die.



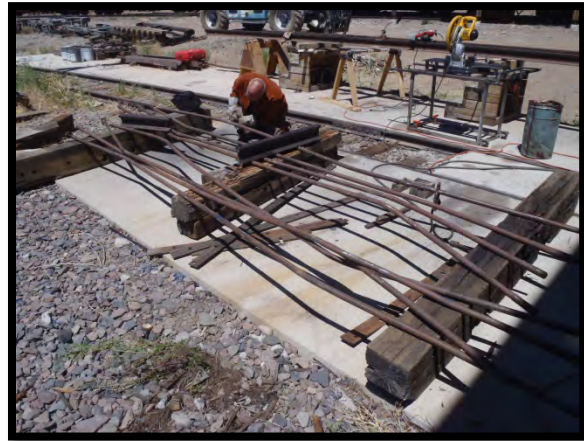
Frame was sand blasted in Session B by the outside contractor that sand blasted the two frameless tank cars.



Frame coated with red oxide primer.



Angle iron has been cut and grinded to fit and will be welded in a later work session.



Worn truss rods were built up by welding them and then the welds were ground down as close to the original truss rod size as possible.

Both center wood stiffing beams were cut to size, drilled, and installed. Two (of four) wood frame channel beams were cut to size, drilled and installed. All (24) door hinge blocks were cut and fitted to their hinges. The bottom section of both center needle beams were cut and had their queen posts attached.

Both trucks were rolled back to have their pivot plate cleaned and lubricated, all wheel bearings and axle bearing surfaces were cleaned and lubricated and new lubrication waste was installed.. All A end truck journal boxes had new wood dust seals installed.



Center wood stiffing beams and two wood frame channel beams have been installed.



TL Bill Pratt briefs CTSRR President and General Manager John Bush on the progress of the rebuild as Friends President Tim Tennant looks on.

Comments; Ed Lowrance had the frame sand blasted before this work session. This saved us several days of work, and probably resulted in a much better blasting than I could have done.

Due to a miss-communication, our wood was not ordered on time and was not received until the middle of the third day of the session. I estimate that this set us back by at least two days.

The food preparation ladies did an outstanding job and should be commended for doing so. Mike O'Nele is doing a great job of organizing the tool room and also helped us several times when more bodies were needed.

Session G: Fuzzy cut a replacement for the top of the A end sill which was badly corroded and Russ Hanscom welded it in. (Picture on the next page.)

Project Status: What additional work is required? Projected for the next session; The two additional frame channel beams must be fitted and installed, all four needle beams and the truss rods must be installed, the brake cylinder, brake air lines, and all brake linkage must be installed. All five frame cross members and both bolster saddle plates must be reinstalled.

Projected for following sessions: All frame center nailers and decking must be installed, all door hinges must be installed and all doors must be made and installed. All upper structure and all safety hardware must be installed.



Russ Hanscom welding new steel on DGB #783 end sill.

Project 1164 – Masonry Pointing – Lava Pump House

Objective: The Lava Pump House's lava stone masonry is largely intact, but the mortar is deteriorating in several places, especially around the west wall and associated chimney, and window frames on the north and south sides of the structure. Deteriorating mortar will be removed, the affected areas and surrounding walls will be thoroughly washed, and then repointed. The structure survey crew has photo-documented this building several times over the past decade and has surveyed the primary areas needing work.

Team Leader, Sessions C & D: Jim Herron

Team Member, Session C: Howard Bunte

Team Member, Session D: Douglas Christensen (Monday through Friday), Ron Horejsi and Alan Green (Thursday & Friday)

Work Accomplished: Session C: During the first two days of the work session, Howard Bunté and Jim Herron prepared the pump house for repointing by clearing brush and small trees that had grown back since 2011, and trenching around the building to expose foundation stones. In addition, an axe and mattocks were used remove tree stumps that were close to the building. Figure 1 shows a section of this trench work, along with newly repointed mortar on the NW side of the building. Because the materials ordered for this project in 2012 could not be located, Bunté and Herron reconnoitered the hardware store in La Jara, CO for new materials. This store carried Type O mortar mix. A small quantity was mixed with water and used re-point a small area on the lower SE corner of the pump house. This was allowed to set overnight, and the next morning team leader Herron decided that it was too hard and gray-colored to match the historic mortar. He then used mortar composition tables obtained from the National Park Service and an Excel spreadsheet to determine how much Mason's sand and lime to add to Type O to convert it to the softer Type N that was more historically accurate. Better color matching was obtained by tinting the mortar mix with a buff-colored liquid cement color (Quikrete no. 1317-02) obtained at a hardware store in Alamosa, CO. However, the historic mortar color varied somewhat between the different sides of the building, so the rest of Session C was used to empirically determine the optimum tinting formula to match the historic mortar.

Session D: The first day of the work session, Doug Christensen and Jim Herron removed loose mortar from regions to be repointed, as well as chiseling out the "test" mortar patches added the previous week. Regions to be repointed were then brushed with a whiskbroom and thoroughly wetted them using a spray bottle before applying the Type N, tinted mortar mix. The mortar mix was prepared in 5 gallon plastic buckets using water pumped from Rio Los Piños using a submersible electric pump. Mortar was mixed thoroughly using an electric mortar mixer purchased for the project. The North and East external walls of the building were finished by Wednesday afternoon. Figure 1 shows a newly repointed region in the NW lower corner of the North wall. Figure 2 shows a repointed region of the SE lower corner of the East wall. Because the West and South walls required significantly more re-pointing than the East and North walls, Ron Horejsi and Alan Green joined the team on Thursday and Friday. The lower half of the West wall was essentially completed on Thursday and early Friday morning. Figure 3 shows repointing on the lower half of the SW corner of the West wall. However, a thunderstorm with extensive of electrical activity drove us back to Antonito about 11 am on Friday morning, leaving the upper half of the upper half of the West wall and the all of the South wall undone.

Project Status: Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

Significant work was accomplished during the C & D sessions. In particular, a number of unknowns were examined and determined including mortar composition, tinting, and procedures for mixing and handling mortar in a remote site with no electricity or work session infrastructure.

This culminated in 2.5 exterior walls being repointed, despite the small crew sizes. Remaining work includes:

- 1) repointing the upper half of the West wall;
- 2) repointing the entire South wall;
- 3) repointing door and window sills;
- 4) interior repointing;
- 5) resetting the loose Voussoir in window frame arch in east window of the south wall; and
- 6) some carpentry work on fascia and window sills.

Significant progress can probably be made next year on nos. 1-4 with adequate manpower and scaffolding to access the upper reaches of the building. Nos. 5 & 6 have somewhat different manpower and equipment requirements and may best be left to a separate team.

Mixing mortar (even with the electric mixer) is physically taxing at high elevations (Team Leader Herron had shoulder & arm pain afterwards that took 3 months to heal). Thus, either more crewmembers should be dedicated to this task, or a larger scale mortar mixer needs to be used that requires less lifting of materials.

Figures: (Below)



Figure 1: Trench work and repointing at lower NW corner of North wall.



Figure 2: Repointing of lower SE corner of East wall. Foundation stones were exposed by trenching.



Figure 3: Foundation stones and repointing of lower SW corner of West wall. Dark colored mortar was still wet when photo was taken.

Project 1168 – Convert Box Car #3585 to New Tool Car

Objective: To continue the conversion of box car #3585 into the Friends new tool car.

Team Leader, Session C & D: Craig McMullen

Team Members Session C: Philip Barney, Jerry Hawkins, Patricia Sandt & Brad Simpson

Team Members Session D: Bob Hayes and Don Sandt (Thursday & Friday only)

John Ferrell (Thursday only).

Work Accomplished: Built new sliding doors and installed with original hardware.

Installed upper and lower corner braces, steps and checked all grab iron attachments.

Installed end door/windows and placed clasps and locks.

Built and installed new roof walk boards and brakeman's platforms.

Installed service counter and additional $\frac{3}{4}$ inch plywood on walls for hanging tools.

Attached brake wheel and retainer to fascia.

Build and installed new fascia boards on all four sides.



Patricia Sandt priming one of the two new doors for the new tool car.



TL Craig McMullen has just finished tapping bolts through the car that holds the overhead door railing as Patricia Sandt tightens up the nuts on the inside of the car.



The inside of the tool car takes shape.



TL Craig McMullen has notched a work counter support post and was able to gently tap it into place with the palm of his hand.



Don Sandt looks up as TL Craig McMullen explains something about the roof walk.



Bob Hayes is cutting a roof walk board. Dan Sandt, on the ladder, will be given another measurement for another roof walk board which was being taken by John Ferrell on top of the car.



TL Craig McMullen holds a bracket in place as Dan Sandt screws the roof walk board to the bracket.

Project Status: To be completed: Paint, letter and number the car. Transfer tools with direction of the tool car staff. Additional shelving, peg board, hooks, etc. will probably be needed. Install lights, electrical outlets, switches and phone connections.

Project 1182 – Repair Station Loading Dock

Objective: Replace any rotten lumber on deck and loading dock next to the Ticket Office.

Team Leader, Session A: Ron Lira

Team Members, Session A: Herbert Druby & Alan Robson

Work Accomplished: Replaced 71 loading dock 2 X 6's. Removed some of the lose 2 X 12's on the front of the loading dock that were nailed on. Then they were screwed back into place.



A pile of old 2 X 6's that have been removed and part of the new ones installed.



All 71 2 X 6's are in place.



TL Ron Lira, Alan Robson & Herbert Druby removing a 2 X 12 that was nailed on and replaced the nails with screws.



Herbert Druby, TL Ron Lira & Alan Robson load the old lumber on the Friends Kubota to be hauled off by Marshall Smith.

Project Status: Completed

Project 1185 – Repair Long Reefer #163

Objective: Remount ladder, grab bars, end braces, coupler release and other hardware to A end of car. Working one section at a time from AR to BR, detach hatch stringers from fascia, remove existing fascia's, then old siding and replace with new siding. Re-use existing fascia if salvageable and reattach. Store all unused material and clean-up work site and prime any new wood before end of session. Before further demolition takes place on the right side and B end of the car we feel it is the first priority to remount the hardware to the A end of the car. This will insure it does not become misplaced and it will also serve as a necessary learning process before the more complex B end is resided. Remounting the hardware to the A end will involve 2-3 team members working together outside the car as well as inside the ice bunkers. Two to three other team members can begin the process of removing old siding on the right side by removing nails from the Murphy roof. Hatch stringer bolts can then hopefully be removed so the side fascia's can be carefully pried loose in hopes of reusing them. Due to deterioration they may not be salvageable. Working towards the doors, siding will be removed and replaced before proceeding further towards the B end as any new paneling and fascia will have to be primed as this is the final work session of the season. Further removal of old siding and replacement will be done as time permits. It is possible we may remove the hardware from the B end of the car during this session allowing repaneling as well.

Team Leader, Session F: Phil Nissen

Team Members, Session F: Michael Johnson, Michael Kennedy, Art Montgomery & Jim Nissen

Work Accomplished: We began by drilling and/or reaming out holes to mount hardware to the A end. This required one or two persons inside the ice bunker and another outside. By week's end **much** of the hardware removed from the A end of the car was installed and/or fitted in place as was some AR hardware. Two other team members began removing hatch stringers, fascias and then began removing old paneling on the R side.



Old paneling being removed.



New paneling being installed.

New paneling was then installed after new tar paper was placed on the upper half of the car to repel moisture. One team member successfully rethreaded several bolts that had been cut or

sawn off last year allowing them to be reused. The entire R side was successfully re-paneled and the car primed on Friday morning. Valuable work time was lost due to rainy weather several days as well as the car being moved to a different location late one morning



All of the new siding was primed on the last day of Session F.



The following week after Session F and more rain had fallen.

Project Status: Not Completed - The A end and AR hardware, installation needs to be completed. New R side fascias need to be built and readied for installation. A big project will be removal of the B end hardware trying to salvage as much of the existing mount bolts as possible. Some galvanized sheeting will have to be either removed or bent out of the way so rusted brake hardware mounting bolts can be replaced as they cannot be re-located like some of the braces were on the A end. A second and possibly third additional session will be needed to rebuild all of the hatch walkways, central walkway, and all four hatch covers and install new canvas door seals on the freight doors.

Project 1186 – Cosmetically Restore Engine #483

Objective: Continue and complete if possible the cosmetic refurbishment of engine #483 in the Chama yard area. This should include removal of all visible corrosion and all loose protective paint from exterior surfaces. Details are unknown since I have not seen the engine or the planned work site. The project was initiated in 2012 and I was not involved at the time. I assume that initial inspection will identify the scope of work remaining to clean up exterior surfaces. After clean up, before the end of each session, the surfaces which are prepared will be painted with a primer paint coat. Once all engine surfaces have been cleaned and primed. A final finish coat of paint will be applied. After the finish coat of paint is dry, engine identification painting will be done.

Team Leader, Session C & D: Dan Sandt

Team Members, Session C: Joe Kanocz, Mike McGinley & John Weiss

Team Members, Session D: Bob Hayes, Larry W Ferrell, & John Ferrell

Work Accomplished: The teams were able to remove most visible loose paint and rust scale from the firebox (both inside and outside of the cab), the boiler, and the firebox except for the lower front areas that require significant steam cleaning to remove built up oil and grease removal to get to the metal surface. The sand dome which was left on top of the boiler was thoroughly cleaned and with the help of the railroad equipment removed from the boiler and placed on a palette alongside of the engine so that the boiler surface under the dome could also be fully cleaned. With all the scale and loose paint removed, the entire firebox, boiler, smoke box & running gear that had been stripped were then painted with rust inhibiting paint. During this process, the yard was searched for missing tie rod covers which were found in one of the storage boxcars. The missing covers were all replaced and painted also. Finally, the smoke box and part of the lower firebox sides were painted with a finish coat of silver paint. Last, the two cab front doors and the one side window that were rebuilt by Jim Hickman over this past Winter were fit, primed and installed in the engine cab.



Mike McGinley using compressed air to blow various front end parts after rust, old paint, grime, etc. have been loosened.



TL Dan Sandt, Mike McGinley and Joe Kanocz painting primer on the side of the engine.

This task identified that the fittings for closing and locking the doors in position needed to be located and installed at some later time. Also, the glass for these three cab closures also need to

found since there was a receipt that John Eng gave to me indicating that the glass was cut but we were unable to locate this material. There was some discussion that the cut glass may still be sitting in the stained glass shop of the member (I don't remember his name) who volunteers as a docent. Also, while installing the one window we discovered that in fact a second sliding window will be required on both sides of the cab to fully close the side openings of the engine cab. Finally, we will also need to look at the other K-36 engines and identify the correct construction of two vertical sliding windows for the rear cab openings to fully refurbish the cab window closures.



TL Dan Sandt and Bob Hayes work on a cab door and window built over the past winter by Jim Hickman.



Engine 483 at the end of Session D shows a cab door and window installed.

Some time was spent roaming the open box cars in the yard looking for appliances and other gear removed from the engine with nothing found. The next sessions need to first clean the remaining smoke box surfaces removing grease and dirt build up using a rental pressure steam/solvent cleaner if possible. Then probably with the railroad's help the firebox/boiler insulation cowling needs to be found and the big task will be cutting and placing temporary insulation onto the boiler and firebox and then placing all the covers on the engine. With the covers in place, the engine can then have finish painting of all external surfaces completed.

Once the engine covers are placed and painted, reassembly of all the appliances can be done to complete the cosmetic display condition of the engine. I assume that not all piping will be reinstalled so that someone with detailed knowledge will have to survey the engine and decide just how correct the cosmetic rebuild will be done. However, the next big job to be tackled should be the boiler and firebox lagging and cowling reinstallation and this needs serious consultation in order to find the parts that were removed from the engine. I suspect that much of the tie down straps (sheet metal) will need to be refabricated since some remaining tie down hard points show the straps have been broken.

Project Status, Not Completed: As stated in the work description above, the project only has a good start and much work remains.

3

Four remaining windows still need to be built (two side sliders and two rear vertical sliders) installation - 2 days 1 person.

Glazing for all the new doors & windows needs to be completed and installed - 3 days 1 person.

Installation of temporary lagging on boiler and firebox - 2 weeks 4 people.

Installation of cowling over lagging on boiler and firebox - 2 weeks 3 people plus 1 week 2 people to fabricate broken tie down straps.

Finish steam cleaning lower front of smoke box and protective painting - 1 week 2 people.

Finish painting the installed boiler and firebox cowling and running gear - 1 week 3 people.

Install the selected engine appliances and piping - 3 weeks 4 people.

Finish painting the engine appliances - 1 week 3 people.

This is my best guess with a not very educated knowledge of the complexity of the individual tasks.

Project 1187 – Repair Flanger #OK

Objective: Replace the rotted outside sills and decking. Rebuild brake cylinder as needed. Disassemble all of the hardware attached to the side sills. Use the old side sills as patterns for cutting mortises into the new side sills. Soak the side sills with Boiled linseed oil for preservation of the side sills. Prime all areas of the side sills prior to reassembly. Reassemble the sides reusing all of the old hardware, priming all unexposed areas prior to assembly. Rebuild brake cylinder as needed and reinstall, check linkage and brake shoes. Paint and re-letter when all assembly is complete.

Team Leader, Session A & C: Terry Rider

Team Members, Session A: Sherri Rider

Work Accomplished: No team leader report received.



Project Status: Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

Project 1191 – Repair High Side Gon Car #1232

Objective: Repair High Side Gondola Car #1232 so that it is functional, safe to operate, and historically accurate. Using identical materials from when the car was built in the 1920's, preserve the car's integrity.

Team Leader, Sessions C & D: James Davenport

Team Members, Session C: Gary Ehler, Robert Goin, Markus Hagemann, John Sprenger, Jack Heiermann & George Detwiler (midweek reassignment)

Team Members, Session D: Jack Heiermann & Paul davenport (midweek reassignment)

Work accomplished, Session C: 1. Demolition of rotted or broken wood pieces on all top side boards, 4 posts, 8 post extensions, 3 center sill sections; remove and attempt to recycle approximately 50- 3/4" and 1" bolts; 70% of floorboards; 4 feet of side sill; and brakeman's platform.

2. Cut and replaced one center sill
3. Removed tensioning nut.
4. Cut and replace 4-foot section of side sill
5. Using Wood Epoxy, reconstruct end of side sill, NE corner.
6. Cut and replace brakeman's platform with brake wheel re-mounting and paint.
7. Cut and replace 4 posts and 8 post extensions.
8. Cut and replace all of top side boards.

Approx. 204 man hours, **NO** injuries

Day C-1 Assess team strengths and skills. Look over project to formulate action plan and time-line. Order lumber and hardware. Secure demo tools and begin demo.

Day C-2 continued demo. Mechanical work as needed.

Day C-3 finish demo. Pickup ordered lumber and hardware, apply primer to lumber.

Day C-4 installs side posts.

Day C-5 finish installing side posts. Inspect car and wrap up session.



Rotten wood being removed from the floor.



Two different piles of rotten wood out of 1232.

Work accomplished, Session D:

1. Cut to length and miter floor boards. Move lumber into gondola 1232.
2. Cut 2, 10-foot center sills.
3. Install one 10-foot center sill with 16 bolts.
4. Reinstall all grab-irons, tighten all.
5. Trim and hammer ends of exposed bolts
6. Epoxy treatment on exposed wood center sills.
7. Cut and install one brake support beam, reattach one other.
8. Cut and install brake support beam blocks.
9. Brake pressure test and replace valves. (Clyde Putman, project #0780)
10. Using Wood Epoxy, 75% complete on reconstruction of NW corner of side sill. (waiting for delivery of more Wood Epoxy)
11. Installed weather barrier over north end exposed sills.

Approx. 97 man hours, **NO** injuries

Day D-1 Assess team strengths and skills. Formulate plan and time-line. Order wood and hardware.

Day D-2 Install siding boards. Mechanical work as needed.

Day D-3 Finish installing siding boards. Prep to paint.

Day D-4 Paint.

Day D-5 Misc. tasks. Inspect car and wrap up session.



Jack Heiermann carries new flooring lumber to the car.



Protective rubberized strips (in white) has been placed over the sills to protect them as much as possible against the elements.

Project Status: Recommendations to complete the project:

1. Install one 10-foot center sill, lumber is cut to fit, will require 16 bolts. – 24 hours
2. Reinstall 2 brake support beams, new threaded rods needed. – 6 hours
3. Install weather barrier on exposed sills. – 2 hours
4. Wood Epoxy on NW corner of side sill and around grab iron support on NE corner – 4 hours
5. Install 40 floor boards. – 40 hours

6. Priming of new wood and paint - unknown
7. Brake adjustment as per Clyde Putman - unknown
8. Remove bolt inventory from inside gondola. – 1 hour
9. Cover car to protect raw wood IF not painted prior to winter - unknown

Estimated hours to finish: 77

Project 1197 – Construct Passenger Truck Sets

Objective: Start fabrication of trucks.

Team Leader, Session B & G: Russ Hanscom

Team Member, Session B: Sam Hauck

Team Members, Session G: Bob Reib, Ian Kelly and Fuzzy Anstine

Work Accomplished: The work we hoped to accomplish was inventory useable parts on some old trucks and start preparing new castings.

Due to a shortage of people and the more urgent demand of completing the pole barn structure, the trucks project got just over a day of activity.

We have four truck carcasses, each started as a composite truck, a mixture of oak and cast iron. Over the years, the RR had welded on sections of steel to stiffen the trucks and extend their lives. When we started salvage of parts from some old trucks; Sam was using a socket wrench with a six foot bar to get some 1" nuts loose. We had a sandblast crew working there blasting the frameless tank cars and they took pity on us and loaned us a 3/4" drive impact wrench from their service truck; life got a whole lot easier - it took Sam a short time to get most of the bolts loose or off on all four truck frames.

As an experiment, we next tried to get the added steel off of one of the less heavily modified frames. It was possible to cut the welds using a cutoff wheel on an angle grinder and one truck was taken back to "original" condition in a few hours, an encouraging result. We next removed the four corner castings, which are each slightly different. These can be used for patterns for new castings or reused on a new truck frame.

While we do have a lot of parts, and have just salvaged some more; we are still missing most of the expensive parts required for a complete truck. Major parts still needed are axles, wheels, bearing brasses, brake beams, and springs. Most of these are purchased items. 053 is nearing completion and could be painted and out the door as early as this fall; however it will have to remain on the freight trucks until the coach trucks which it should have are completed.

In between sessions there are a few volunteers with home shops making some of the special hardware items needed for the new trucks.

Session G: Bob Reib spent the week on the mill and Ian Kelly spent the week on the lathe with lots of results. Some types of small castings were fully machined and a good start was made on some of the larger ones. The pile of cuttings and shavings was impressive. Fuzzy Anstine and his friend Brad Simpson were on site for only two days but they managed to fit the journal boxes to the pedestal castings and start preparing some corner castings – lots of heavy lifting involved. Brad Simpson removed the leaking hydraulic cylinder from the pallet lift so it could be repaired. We made u some drilling templates to support processing some of the castings.



Ian Kelley and Bob Reib making parts look like new.

Project Status: Project just started.

Project 1200 – Osier Station Repairs

Objective:

Team Leader, Session

Team Members, Session

Work Accomplished:

Painting of this project combined with Project 1160 per Project 1160 TL Don Stewart.
Ted Smith

Project Status: Completed

Project 1201 – Repair Rider Gon Car #6205

Objective: Repair Rider Gon Car #6205 (Replace floor, some side boards, replace truck set and remount.) Measurement and photographing of existing structure(s) will be done prior to work sessions. Final measurements and demolition will be the first steps followed by rebuilding as similar structure(s) to the removed ones as possible. Painting will be last.

Team Leader, Sessions A & B: Tim Bristow

Team Leader, Sessions C & D: Painting of this project combined with Project 1160 per Project 1160 TL Don Stewart. The car was primed and painted in Session D. (Ted Smith)

Team Members, Session A: George Davies, Geoff Gordon, Dan Sandt, Marshall Smith and George Trever

Team Members, Session B: George Davies, Ted Kazmar, Dan Sandt, Marshall Smith and George Trever

Work Accomplished: Many of the wooden surfaces of this car had deteriorated such that not only the car's appearance but safety of the passengers was being compromised. We completely removed all of the seats, end walls, "belly rail" tops, and floor planking. We removed almost all of the sidewalls.



George Davies, George Trever, Dan Sandt & TL Tim Bristow are still in the tear down mode.



With most of the old rotten wood removed new 2 X 4's have been screwed into place.

The floor planking was replaced with 1" (nominal) thick x 6" wide TREX. Since the allowed span of this thickness of TREX is specified as being 12" or less, the decision was taken to use pressure treated 2 x 4's as nailers. These nailers were placed across the car and screwed to the wood sills. The TREX was then placed lengthwise being screwed to the 2 x 4's. All of the nailers and sills were covered with a self-adhesive rubber ice shield to provide as much weather protection as possible. All of the cut ends of the nailers were treated with wood preservative.

The team members did such a good job of minimizing waste that there was sufficient TREX to use for the "belly rail".

One of the side sills had some rot which was removed and replaced with epoxy filler. Since this car's outer sills are reinforced with full-length steel angles, no structural concerns arose. The ends and sides were rebuilt from new structural lumber. The pipe handrail was reworked and replaced.



George Trever, George Davies & Dan Sandt Work on one side. All of the 2 X 4's have been covered with a rubberized membrane to protect them as much as possible from the various Chama elements.



New benches, new TREX flooring, some new wood on the side-walls and ready for paint.

The car only requires priming/painting/lettering by the Friends in order to be completed. One or two welds need to be repaired by the railroad.

While our team was doing all of the above, Clyde Putman and Brooks Wilson removed/replaced the "B" end truck and replaced both its wheel sets. The wheel sets were changed because of the many flat spots on the old wheel sets which made for a very rough ride. The brakes were also tested.



Rider Gondola 6205 has been completed and is ready for lettering and the Cinder Bear Train.

Project Status: Completed

Project 1206 – Construct Historical Marker Stands – Fabricate Parts for Frame & Posts

Objective: Construct Historical Marker Stands (Fabricate parts for frame and posts)

Team Leader, Session A & B: John Engs – Cancelled - lack of volunteers.

Team Leader, Session D: Jim Florey

Team Members, Session D: (Thursday & Friday) Ted Norcross, Emmanuel Lopez, Mick O’Nele and Mike O’Nele.

Work Accomplished: During Sessions A & B there wasn’t any work done on Project 1206. The project was cancelled due to lack of attendance at the sessions.

During Session D (not scheduled) after Jim Florey crew finished the CSF roof their attention turned to Project 1206. They were able to obtain rail and joint bars to use in construction of the sign posts. In 2 days they were able to cut all rail posts to the proper length and mark the joint bar locations.

Project Status: Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.

Project 1206 – Osier Site Historical Markers – Install Posts & Frames

Objective: Planning issues ...

- 1) ... How many posts/frames to be installed?, where are they delivered to ?[FOB Antonito CO, or Chama?] are they shipped assembled?, or field assembled at Osier?...
- 2) Do we have a site plan?... is there an interpretative trail that goes with the frames?
- 3) These signs are in some cases 10 feet tall... they show depth of embedment at only 3 feet... This is probably too shallow ... plus digging into rock issues...
- 4) posts are made of rail stock.. probably 30 pounds per foot.. or 400 pounds plus per post...need some help lifting assembly into excavated bore hole possibility of using a backhoe?
 - A) ...get copy of purchase order, number ,weight, shipping ,assembly
 - B) ...research embedment issue
 - C) obtain site plan data
 - D) what equipment is available for boring holes and lifting assemblies?
 - E) logistics into Osier....
- F ...given that signs are being placed at Osier.. do we need SHIPO clearance?... is there an interpretative plan?...

Team Leader, Session E & F: M. O'Conner

Team Members, Session E:

Team Members, Session F:

Work Accomplished:

Project Status: () Completed () Not Completed – if the project was not completed – please give a brief description of the remaining work to be done and estimated time or number of work sessions needed to complete the project.