



# C&TS Dispatch

Vol. 18 No. 3

FALL 2005

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## HISTORIC PRESERVATION – 2005

### *The June Volunteer Work Sessions*

(All photos by Tom Cardin unless otherwise noted.)

#### **UTLX TANK CARS**

*Project Objective: Create a 50-year finish on the tank cars*

*Session: C*

*Team Leader: Dave Collins*

Because of the unsuccessful 2004 attempt to blast and repaint a tank car, extensive research was done to identify an effective blast abrasive and long-lasting overcoat. Shipyards, commercial paint manufacturers, and abrasive supply companies were contacted. Similar responses from all the sources indicated that the present coats should be removed down to the bare metal and repainted, preferably with a long-lasting, multi-stage commercial epoxy paint or alternatively with an "industrial" consumer grade paint such as Rust-Oleum Professional products. Buying and transporting the abrasive and blast equipment to Chama, where this work was done, proved to be a significant effort. Bob Tully found that a local resident, Andy Graham, is a blaster with all the equipment. He was

willing to do the work for a reasonable price and was hired for the job. He supplied all of the required equipment. His equipment and experience were critical to the success of this project.

While setting up to begin work Monday morning, we found that Andy did not have the coal slag abrasive that had been recommended and contracted for the project. He supplied his own blasting media, fine, silica-free river sand that was slightly less abrasive than the specified coal slag. It turned out to be a very effective material for removing the layers of old oil, scale, rust, and paint. (After chipping away paint on the end of one car, no fewer than seven layers of paint/primer of various colors were discovered.) The coating specs call for the prepared surface to have between 30% and 5% scale remaining, in practice meaning a minimum of a "silvery-brown" metal surface for proper adhesion of the finish. Blasting required approximately 14 hours per car (excluding breaks, down-time, etc). Rotating in one-half to one hour shifts, the team of five kept the blaster going continuously each day from sunrise till dark. Both cars were finished by Wednesday noon and one car was brushed and blown off in preparation for priming Wednesday afternoon. Approximately four 50-gallon drums of river sand were used per car.

The primer used is Sherman Williams Zinc Clad III HS epoxy primer. Each 3.25 gallon batch includes 75 lb. of zinc powder. Although paint stores and manufacturers recommend using airless sprayers with this primer, great difficulty with clogging and break-downs was encountered. The team



*Chuck Armstrong sand blasting one of the tank cars on the RIP track in the east yards at Chama.*

*See Preservation, page 4*

# C&TS Dispatch

*Friends of the Cumbres & Toltec Scenic Railroad*  
*William Lock, Founder*

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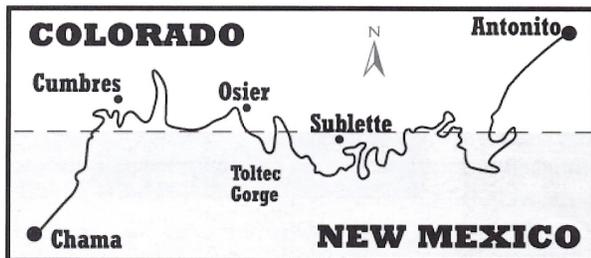
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The C&TS Dispatch is published four times each year by the Friends of the Cumbres & Toltec Scenic Railroad, Inc., 6005 Osuna Road NE, Albuquerque, NM 87109. The Friends of the Cumbres & Toltec Scenic Railroad, Inc., is a New Mexico nonprofit corporation.

The Friends is the official museum arm for the Cumbres & Toltec Scenic Railroad, a 64-mile-long operating railroad and museum of railroad history and technology between Antonito, Colorado, and Chama, New Mexico. The railroad is owned by Colorado and New Mexico and is operated by the Rio Grande Railway Preservation Corporation. As the museum arm, the Friends is dedicated to the preservation and interpretation of the railroad. The Friends is an Affiliate Member of ARM (Association of Railway Museums) and a Member of TRAIN (Tourist Railway Association).

Family membership in the Friends is \$25.00 per year; outside the USA membership is \$35.00. All contributions are fully tax deductible and will be gratefully accepted. Please write us in Albuquerque or call us at (505) 880-1311 for information about the Friends. The Cumbres & Toltec Scenic Railroad is both a National and a State Registered Historic Site.

## Cumbres & Toltec Scenic Railroad



Denver & Rio Grande Railway—1880 to 1886  
 Denver & Rio Grande Railroad—1886 to 1921  
 Denver & Rio Grande Western Railroad—1921 to 1970  
 Cumbres & Toltec Scenic Railroad—1970 to 2005  
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## PRESIDENT'S COLUMN



### *Balance . . . Balance . . . Balance*

Most of you probably remember Karl Wallenda and his family of high wire walking artists, who during the 1970's thrilled crowds with their high wire acts. As I recall, they walked between the rooflines of many major sports stadiums and other famous venues in the U.S. during this period. The Wallenda's possessed a great deal of courage and certainly good balance.

Through my discussions with our membership, I have learned much about the organization, its attitudes and opinions. We are a dedicated group of people who want to do the best we can for the Cumbres & Toltec. We scrape and paint boxcars, rebuild stock pens, repaint mileposts, and many other tasks too numerous to list here. The point being that we are pretty focused on the organization's preservation mission and our members enjoy what they do at our annual work sessions. We can say without a doubt that the Friends are doing our best to save the historic fabric of the former Denver & Rio Grande between Antonito and Chama.

As we continue in this mission, let us not lose this focus and passion for the tasks at hand. But as we participate in our summer work sessions, don't lose sight of the fact that the C&TS is an operating railroad. It must haul paying passengers and generate income or it will cease to operate. I mention this because there might be times when this fact gets lost in the shuffle. As the Friends has its mission, the Commission and RGRPC has theirs and they are charged with keeping the railroad running. As we expect respect from the Commission and RGRPC for our contributions, please respect what their function is and the challenges they face. The C&TS is not an easy railroad to operate. Its physical plant has many curves, steep mountainous grades, and, yes, its motive power is steam.

Before we might become critical or question something we see, I would ask us to remember that we are the Friends of

the railroad. We are part of a Family and each member wants to try and do their best for the C&TS. As we ask for the support of the other members of our Triad Family, each of us needs to support them. We must maintain a balance of understanding what each party must do to make the Cumbres & Toltec as successful as it can be. Each of us needs to juggle our mission, as the museum arm of the Cumbres & Toltec, with the fact that it is also a tourist railroad. The C&TS hauls largely tourists, who as we know are looking for an experience. These tourists come to southern Colorado and northern New Mexico for the beautiful surroundings and the opportunity of riding behind historic steam locomotives. To most of these folks, a ride on the C&TS is entertainment.

If you view our C&TS Family in this light, there are tremendous opportunities that continue to exist. We have that opportunity to convey the rich history of the D&RG narrow gauge system to our riders and the general public. We also have an important story to tell relative to our organization, what we do, and how this railroad has survived through thick and thin. Again, let us remember to balance the Friends mission with and remain cognizant of the RGRPC's and Commission's responsibility to keep the Cumbres & Toltec Scenic Railroad running. Having said this, let me be clear that as members of the Friends we must still continue to be steadfast in support and execution of our cause, historic preservation and interpretation of the C&TS.

*See President, page 15*

### GENERAL PALMER AWARDS PRESENTED

The General Palmer Award was created in 2003 to honor members of the Friends, who as builders of this organization have demonstrated the same entrepreneurial spirit as Denver & Rio Grande Railway founder General William Jackson Palmer. The first three awards were presented in June 2003 to Bill Lock, Terri Shaw, and Howard Bunte. At this year's Annual Meeting in Chama, we were honored to present the fourth award to Spencer Wilson, a long time board member and Friends Librarian, the fifth award to Joe Vigil, former General Manager of the C&TS, and the sixth award to Art Nichols, a board member and Editor of the *C&TS Dispatch*. We appreciate the contribution each has made to further the cause of the Friends.



Art Nichols receiving a General Palmer Award at the Annual Meeting. (Tom Cardin)



At the Friends Annual Meeting in Chama, Bill Lock (l), Spencer Wilson, Jim Herron, and Tim Tennant looking on as Spencer receives a General Palmer Award. (Tom Cardin)



Joe Vigil receiving a General Palmer Award at his home shortly after the Annual Meeting. (Nickie Vigil-Garcia)

*Preservation (continued from page 1)*

switched to an air-based spray gun and completed the priming by Thursday noon with no further problems. Three 3.25 gallon batches covered the two tank cars.

Given the delays with the airless sprayer and time required to blast the cars it was decided to omit the intermediate coat (SW's Macropoxy 646) and only apply the final coat. Consulting with SW by phone, the price of this is a shortened coat life. Based on "wear and severity of service" (the yard climate at Chama is the only exposure the cars will have, with little use-wear and no severe service) the life of the finish can be estimated to be about 25-50 years instead of 40-80 years.

The top coat is black SW Acrolon 218 HS acrylic polyurethane. It was cut with ½ gal of R7K15 solvent for each 4.4 gal batch to make the paint flow easier, give less orange peel, and double the pot life. The first car was finished Thursday evening as cotton tufts from the adjacent cottonwood grove snowed down on our newly painted black tank! Painting in the early evening is ideal because the air is still and cool and the surface is not too hot. We started at sunrise Friday morning for the same reason and finished the second car by Friday noon. The first car used 11 gal; the second used 7 gal. This can be attributed to a learning curve.

An excellent technical report on this project was submitted to the chroniclers. It contains detailed mixing instructions for the finishes and recommendations for equipment and preparation and painting processes. This report should be a primary reference for any future teams painting tank or other metal cars. The team recommends that one car blasted, primed, and painted with one or two coats is enough for a team of four people. The team also noted the importance of Andy Graham's professional knowledge and skills in comple-

tion of this project and recommends that he be included in future projects.

*Project Status: Ongoing*

### **CABOOSE 0579**

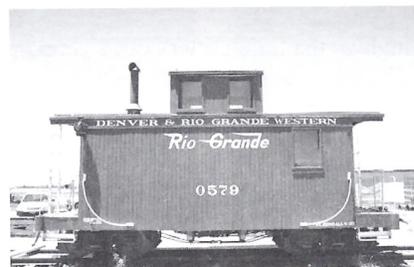
*Project Objective: Complete restoration of the caboose*

*Session: C*

*Team Leader: Bill Kepner*

After many years of restoration work, caboose 0579 has been restored and painted as it would have appeared in 1948. Work accomplished during session C included removing trucks and replacing bolts that were too short and installing bearing blocks with 5/8-inch clearance. The team installed an original end railing from RGS 0401, and cupola roof grab irons and an end railing made by John Cole. John also made the A-end body end grab irons. Three lower windows made by Roger Briggs were installed. The team finished painting the interior green, and also painted the platforms, the grab irons, and the floor. The team finished the outside lettering and installed the conductor's air gauge that Chris Trunk had donated and the wheel followers that Charlie Irvin made.

The team had intended to have the caboose pulled around the loop and then inspected underneath for clearance problems; however, this will be done after the track work to the



*Caboose 0579 parked in the Antonito yard, work session C. (Bill Kepner)*

Antonito CRF is completed. Minor paint touch up is needed and this may be done during August. The three lower windows currently have plastic panes, and these will be replaced with glass in August. Interior upholstery will be installed at a later date by the railroad.

*Project status: Basically completed*

### **DROP BOTTOM GONDOLA 859**

*Project Objective: Return car to operating condition*

*Session: D*

*Team Leader: Bill Pratt*

In Antonito the team members installed the last nailing strip and associated door hinge blocks and hinges, fabricated two steel reinforcing strips and welded them to two frame cross members, fabricated and installed all 12 drop side doors, installed one side sill, cut out all ten side stake posts and installed one of them, cut center decking pieces, and installed all missing brake system parts.

Additional work needed includes installing second side sill and aligning body with truss rods; installing stake posts, siding, ends and center decking; installing steps, grab irons and brake staff; installing safety door hinge pins and door operating mechanism; testing brake system; and painting and applying lettering.

*Project Status: Ongoing*

### **OY WATER CAR**

*Project Objective: Repair or replace wood walkways*

*Session: C*

*Team Leder: John E. Bush*

Work on this project is being done in Antonito. This former UTLX tank car is the water car for rotary OY and has also been set up and used for fire

control. The old wood from the walkways was completely deteriorated, requiring replacement. The team removed old fasteners retaining the present wood walkways. New wood was measured, cut, and drilled or notched for brake chain. New wood was placed in steel walk supports and fastened in place to match the original. New plates were made to join the various ends and side timbers. All the new wood was treated with a mixture of boiled linseed oil and mineral spirits.

Due to unanticipated delays, the team was unable to get to the top section around the dome during work session C. This should be scheduled for another work session. We felt it was important to get the main walkway portion completed during session C to allow safe replacement of the upper work around the dome.

I would like to give a special "thank you" to my team member Chris Trunk, who was extremely helpful and innovative during this work session. His was the real expertise that accomplished the task. Warren Ringer kindly provided considerable additional assistance following completion of work on caboose 0579.

*Project Status: Ongoing*

## **OSIER DEPOT, SECTION HOUSE, AND STOCK PENS**

*Project Objective: Complete depot, section house, and stock pens*

*Session: C and D*

*Team Leader: Ted Norcross*

The team installed an upper story window at the front of the depot, and new station signs were hung on the depot. The Osier station signs on both sides of the depot can be seen from either east-bound or west-bound trains. Another sign was hung on the front of the depot indicating the elevation and

mileage to Denver (elevation 9,637 ft, 318.40 miles).

During session C the team spent considerable time cleaning all of the section house windows. Besides just being dirty there had been a lot of over spray from the painting that had to be scraped off. Three or four members of the crew worked on this for several days, on and off. Because it is such a laborious job we worked on it for a while and then we would go do something else for a while. We did trim work such as making doorstops, installing and painting them. Seven doors needed trimming. Interior door handles have not been purchased yet. We saved as much of the wood on the interior walls as we could. Anything new is drywall. Trim work is not hard work but extremely time consuming. Some rooms had the flooring saved; in the rest of the rooms beautiful hard wood flooring has been installed and finished.

Minor trim work was done both inside and outside the section house, with lights installed above both of the front entrance doors of the section house. Two transom windows were installed and finished over the two entrance doors. The team built a lift-out door that covers the little storage compartment under the stairs on the main floor of the depot to conserve as much storage space as possible. A telegraph pole was placed between the depot and the section house.

The stock pens are being restored for both sheep and cattle, with the sheep pen portion being five solid boards high so the little critters can't get out. The volunteers built two gates, replaced many posts, repaired three sections of fence with salvaged boards, placed headers on all gate posts, and fixed all fences with new material as needed.

*Project Status: Ongoing*

## **CUMBRES TRESTLE WALKWAY**

*Project Objective: Repair walkway and handrail on trestle*

*Session: C*

*Team Leader: Charles Stewart*

There are 14 vertical posts and braces across the Cumbres trestle and it was necessary to replace 11 of them. New braces were installed on each new vertical post. The entire walkway was replaced with mostly new lumber as very few of the old boards were usable. One beam across the side of the trestle on the opposite side of the walkway was totally deteriorated and was replaced. New railing was installed the full length of the walkway. Shims were added where necessary to firm up and steady the walkway.

*Project Status: Complete*

## **LOG BUNKHOUSE AND LAVA WATER TANK**

*Project Objective: Clean and repair interior of the Chama log bunkhouse, repair Lava water tank, and survey tank and pump house for restoration*

*Session: C*

*Team Leader: Jim Herron*

The team members made the front porch much safer by replacing rotted



*Chama log bunkhouse after cleaning and maintenance.*