



C&TS Dispatch

Vol. 11 No. 1

SPRING 1998

Winter Shop Work 1997-1998

by Earl Knoob, photographs by Tom Cardin

In this first issue of 1998, we present Earl Knoob's report and Tom Cardin's photographs of the mechanical work being done on the C&TS locomotives during the winter in Chama. Earl also tells us about car repair work in Antonito and recent events in the Alamosa, Colorado, railyard.

463

As it did last year, locomotive 463 is hibernating in Antonito this winter. When 463 was returned to service after its piston overhaul in 1996, it was placed in service in September of that year. This put its annual inspection due in September of 1997. The locomotive was taken out of service at the end of August for its annual inspection and its four-year staybolt cap inspection. This work kept 463 out of service for most of September. As 463's annual inspection isn't due again until September 1998, it is spending the winter in Antonito.

463 had the honor of portraying long-since-scrapped Rio Grande Southern 455 on a fan trip last August. 463 was renumbered and the famous RGS rising sun herald was applied to the tender. To make the lettering weather a little, 463 (or 455) was used for a week in regular service lettered this way. It was great to see the RGS's colors flying on an in-service locomotive.

484

This locomotive is one of the big projects for the winter. Last July 484 began to make rather distressing wheezing sounds up the smoke stack while starting trains. The front cylinder heads were removed and inspection showed the piston rings were completely worn out and beginning to disintegrate. At the time 484 was taken out of service for the remainder of the summer. 484 will have its cylinders and valve cages bored out and new piston and valve rings fitted. New pistons may have to be made if the old ones can't be welded up to size.

In addition, 484 is on flue extension. After the end of the season, the smokebox appliances were removed, along with the

bottom two boiler tubes. The boiler was inspected by the Federal Railroad Administration at the end of November and a one-year flue extension was granted. As of January 1, the boiler had been reassembled and the smokebox appliances were being installed.

487

Like 484, locomotive 487 is on flue extension. Also like 484, the smokebox appliances and two bottom boiler tubes were removed for inspection. The FRA granted 487 a one-year extension. The tubes have been replaced, boiler hydrotested, and smokebox appliances replaced.

487 is scheduled to have new valve rings installed. The present ones were installed in 1990. By the end of the 1997 season, the valves rings were leaking so badly that the locomotive was going through an inordinate amount of water while climbing Cumbres. 487 was having trouble making the hill without stopping at Cresco for water. This happened because the live steam from the boiler leaked around the valve rings and into the exhaust passages and up the stack. Steam (and water) is consumed from the boiler but does nothing to provide power to the locomotive. Efficiency suffers greatly when this happens. 487 is also scheduled to receive new side and main rod bushings this winter.

488

After 11 years of service, 488 is getting reflued. The smokebox appliances, the flues and the superheater tubes

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Engine house crew removes lagging from 488 in the Chama yard, November 14, 1997.

C&TS Dispatch

<http://fourworld.compuserve.com/homepages/drichter/focts.htm>

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Photographer	Tom Cardin

Please write the editor at
1307 45th Street, Los Alamos, NM 87544
e-mail: asn1307@aol.com

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The Friends is the official museum support group 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 Cumbres & Toltec Scenic Railroad Corporation. As the museum support group, the Friends is dedicated to the preservation and interpretation of the railroad.

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
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Cumbres & Toltec Scenic Railroad—1970 to 1998

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PRESIDENT'S COLUMN



This year the Friends celebrate their tenth anniversary. At our fall Board of Directors meeting, we took an afternoon to appreciate our past and look at what the next ten years might be. Directors' thoughts about our organization's accomplishments include the quality of the C&TS Dispatch, our outstanding web site, the dramatic changes at Cumbres Pass, the restoration of Sublette village and the cars that have been purchased and returned to the railroad. Less tangible but strongly felt are the clear vision of the mission and the commitment to the work of the Friends by our world-wide membership. The directors recognize the high level of cooperation we have with the other Triad Committee members (the Railroad Commission and the Operator), a professional approach to projects, the diversity of talent of our volunteers and the strong camaraderie and friendships that have been formed over the years.

We talked about the qualities that make the Cumbres & Toltec Scenic Railroad so special: steam, narrow gauge, the history of the West, the beauty of the landscape and the emotional experience of being able to see it as it was and as it is. George Bartholomew talked about some of his first thoughts last year after being selected as the new operator; it came to him that our common goal should be to create a world-class, living history museum. The directors responded with a lively discussion of ideas about typical elements of museums—visitor orientation, photos, exhibits—and ways to make railroading, past and present, alive for the visitor to the C&TS—demonstrations of equipment like the coal tippie and the maintenance-of-way cars, interpreters in the yard and on the train and people re-enacting railroaders, loggers, ranchers and miners. All agreed that communicating the specialness of the place to the casual visitors, most of whom know little about railroad history, was an area where we should increase our efforts. And we felt that the guiding principles should be to conduct these activities in harmony with the day-to-day operation of the railroad and to maintain the atmosphere of authentic steam railroading.

Looking at the projects we would like to carry out, we are always aware that preservation struggles to arrest the deteriorating effects of weather. We have accomplished a tremendous range of rehabilitation work outdoors but know that work on some equipment continues to be deferred until we have an indoor facility. This year we will finalize a site plan, prepare drawings and organize fund-raising for such a facility. Your contributions during this year's renewal campaign have been stronger than ever and I thank you for this confidence and support. Your help will be needed more than ever to help with this next step in our growth.



President's Column

Continued from page 2

Planning and design will also continue this year for the proposal to reconstruct a roundhouse and turntable. All triad members agree that these structures would provide operational, educational and visitor interest benefits to the property. Because the railroad is a historic property, preservation work and new construction are guided by certain standards of rehabilitation. New structures should be clearly identifiable as new construction to differentiate them from actual historic structures and should harmonize with the historic structures in scale height, materials, location, etc.

Concerns have been heard from Friends' members about the Colorado & Southern turntable acquired by the railroad from Elitch Gardens because it is constructed like a bridge—its trusses are as tall as the historic roundhouse—rather than the typical D&RGW deck-type table. Its appearance would not replicate the look of the yard in the historic era. The board has discussed this and I have carried these concerns to the other members of the Triad Committee. The Friends have urged consideration of other alternatives and are pursuing information about other available turntables which would be more appropriate.

We'll continue to work with the Operator and the Railroad Commission to effect a plan for a roundhouse and turntable that meets operational needs while preserving and enhancing the historic qualities of the C&TS.

— Terri Shaw 🌿

Call for Artists

Dick and Karen Cowles are continuing their call for artists to help create *trompe l'oeil* window panels for the Log and Shingle Bunkhouses at Sublette. If you would like to create a panel or two for posterity—especially if you have some ideas for appropriate bunkhouse window scenes—call them at 505-986-1814 or e-mail <richard.cowles@kpmg.sprint.com>.

Election Procedures

In accordance with our bylaws, in this issue of the C&TS Dispatch we are publishing a description of our Board of Directors election procedures. Article Six of the bylaws provides that our members shall elect directors—and eight of the seventeen seats on the board are up for election this year.

Nominations for election to the board are made by the nominating committee or by petition. The five (5) member nominating committee is appointed by the board, and its duty is to nominate eight (8) qualified candidates. Additional candidates may be nominated by petition. A petition for nomination shall contain the name of the nominee, the nominee's consent to serve, the seconding signatures of three (3) voting members, brief biographical information about the nominee, and the nominee's statement of candidacy.

The board will appoint the nominating committee at its meeting in Albuquerque, New Mexico, on March 6 and 7, 1998. Interested candidates should contact any officer, director, or member of the nominating committee to express an interest in serving on the board. All nominations by petition must be received by our Albuquerque office by April 16, 1998. Elections shall take place by written ballots that will be mailed by April 29, 1998. To be counted, ballots must be received by

Helen Spencer

The Friends have learned of the death of Helen Spencer of Bel Air, Maryland. She was a long-time volunteer at the summer work sessions, last attending in 1996.

E. John Stuart

E. John Stuart of Louisville, Colorado, died in 1997. He was an early member of the Friends, joining our organization in 1989.

our Albuquerque office by Thursday, June 4, 1998 (15 days before the annual meeting in Chama on June 19, 1998).

Work Session Registration

We enclosed a flyer in everyone's 1998 membership renewal letter for reserving a registration packet for the June work sessions. If you didn't receive one, request one from our office or download it from our web site. If you think you'd like to come to the work sessions, please reserve your registration packet now (it's harder for us to respond later in the season when the Albuquerque office becomes very busy).

◆◆◆ SPECIAL EVENT ◆◆◆

PRESEASON RAILFAN CHARTER

The Friends will sponsor a preseason passenger train powered by engine 463 on Saturday the 2nd of May. The train will leave from Antonito at 9:00 A.M., and although its destination will be Osier, snow conditions may allow the train to proceed only as far as Sublette. There will be numerous run-bys. This event will mark the first time that passengers can see the Antonito side of the railroad before the beginning of the season, and the scenery should be spectacular. The cost to adult members will be \$60, this includes a box lunch. An announcement of this railfan charter will be mailed to members.

Shop Work

Continued from page 1

have been removed, and all plumbing, jacket and lagging have been removed from the boiler. In addition, the upper rear tube sheet from the knuckle down through the superheater tubes will be replaced.

489

Locomotive 489 was returned to service in July when the decision to set 484 aside was made. It was in service from July through October. The 489 is on flue extension and, even though we ran it for only four months, we have to apply for another extension. So, like 484 and 487, 489 was taken apart and received an extension at the end of November. The boiler was granted an ex-

tension and the boiler was reassembled and hydrotested in late December. 489 is not in need of major repairs this winter and only routine maintenance is scheduled.

497

This locomotive ran faithfully all summer and remains serviceable in case we wish to do any off-season operations. Only routine maintenance (and ever present staybolt replacement) is scheduled.

19

Diesel locomotive 19 is spending the winter in Chama for use as shop switcher and snowplow duty. This year we are attempting to keep as much of the line open to Cumbres as possible. Toward this end, we have modified

flanger OL with the addition of a wedge plow on its front. This plow is the approximate size and shape of the plow you see on the 487 in the summer. So far we have managed to keep the line open from Chama to MP 331.7 (between Coxo and Windy Point). After each snowfall, we take the OL and the 19 up the hill and remove the new snow. OL has extension wings that cut a nice wide swath through the snow and—amazingly enough—we have only derailed it once so far!

Car Repair

Considerable car repair work is being done in Antonito this winter. Several Chama train pas-

senger cars were deadheaded over to Antonito on the last day of operation, October 19. Three of the cars were repaired by mid November so, on November 19–20 and 24–25, diesel #19 made two round trips over the line ferrying passenger cars back and forth. Considerable snow had fallen and #19 spent November 17 and 18 plowing up to 3 feet of snow off the track before it could take its train through.

Locomotive

Mileage for 1997

(compiled by Mark Yates)

463–2867	488–6065
484–1623	489–2378
487–6045	497–5704

Total: 24,682 miles

Scorched Earth Report

Your reporter was in Alamosa, Colorado, the afternoon of December 12 and was distressed to find that the carpenter shop building had been reduced to a pile of rubble with local residents busily picking up the old bricks. Across the yard a crew was busily removing the rails and cutting up the narrow gauge drop pit in the roundhouse. Large cables were strung through the side windows of the roundhouse.

By the next morning the roundhouse was reduced to rubble and the crews were busily tearing down the oil house and the small crew office that at one time was the machine shop office. By the time you read this, the remains of the Alamosa engine facilities will be completely gone.

A couple of years ago I poked my nose into the carpenter shop and found piles of paperwork blowing around in the building. Investigation found it to be car department records from the 1950s through the 1970s. Most of the records were standard gauge, but some narrow gauge records were found. Up in the rafters of the building, there were dozens of cardboard boxes full of old records and every once in a while a box would fall down, break open, and the wind would scatter the contents around the building. I cleaned up what I could, placed it in garbage bags and



Without their tenders, there is room for engines 484, 487 and 497 in the Chama engine house, November 14, 1997.



Time to retract the wings on flanger OL at the second crossing of highway 17. Gerald Blea is the engineer, January 14, 1998.



Engine 488 with backhead lagging removed, January 12, 1998.

carted it home with the intent of someday getting the rest of it. I can only imagine that the remainder of the records came down with the building.

Antonito depot was not on the demolition list. Presently, the track crew uses it for storage, so maybe its death sentence will be delayed for the time being. Eventual preservation at its present location is not practical because it sits in the middle of the wye, and whoever buys it would be forced to move it to another site. The building is made of volcanic stone (probably quarried out of the cuts up near Lava) and would be very difficult and heavy to move. I understand the water tank at South Fork on the Creede Branch is actually leased to the town of South Fork, so perhaps it has a better future.

It is no secret that the Union Pacific wishes to sell off the Alamosa line. I had hoped that a shortline operator would take over the operation before the UP leveled every historic building on the D&RGW.

Earl is Superintendent of Operations for the C&TS and a consulting director of the Friends. Tom is a long-time volunteer at the summer work sessions and the photographer for the C&TS Dispatch. 🍷

Book Review

Getting There: The Epic Struggle Between Road and Rail in the American Century, by Stephen B. Goddard (forthcoming from Basic Books, a division of Harper Collins, 337 pages, index, \$28 plus \$1.68 sales tax).

The author, former journalist and congressional aide, practices law and has written widely on transportation issues. This is a well-researched and well-written study of the evolution of transportation policy in the U.S. and how that policy ended up favoring highways and penalizing railroads. The story is in excruciating detail and finely woven. It is the story of Federal regulations of one industry, railroads, and the very lack of such regulations of highways and the automobile industry—including the very significant trucking industry. This is a very important study for those interested in the story of rail versus highway.

The author also offers to donate \$10 for each book sold to members of the Friends of the Cumbres & Toltec Scenic Railroad. Stephen Goddard may be reached at 10 Columbus Blvd., Hartford CT 06106-1944, phone (203) 549-0490, fax (203) 560-8464.

—Spencer Wilson

Internet Addresses

John E. Blake
Omaha, NE
drg488@worldnet.att.net
(change of address)

Kenneth Brocksted
Salisbury, NH
bevken@webtv.net

Jim McKee
Olympia, WA
spng18@ix.netcom.com

Matthew Nichols
Cincinnati, OH
noctrnalis@aol.com

Dick Pennick
San Diego, CA
dick.pennick@jacobs.com

Jerry Sahnd
Colorado Springs, CO
sahndjbsn3@mcione.com

We will print e-mail addresses of members. Please send the editor an e-mail message with your e-mail address requesting that we print it.



C&TS diesel 19 pushing flanger OL with plow fitted on front. Plow is from a highway snowplow. December 15, 1997 at milepost 342.

PRESERVATION PERSPECTIVE: NO. 11

Uniform of Choice

by Keith E. Hayes, AIA

If you have participated in a work session, you have probably met Ralph Flowers. When I arrive in Chama, I look for a man about 5' 8" tall, standing straight with overalls and a plaid shirt—that's him! For the past several years, Ralph has co-chaired the team that plans the work sessions, locates materials, coordinates assignments and brings everybody and everything together at the right spot on the railroad. Ralph has done an outstanding job—thanks! Bob Akers now has assumed this position: good luck to Bob.

One thing I always notice about Ralph is how clean he is as he walks about the yard. I think the key is the overalls. My grandfather, a mechanic, always wore them. He claimed they were very comfortable and easy to move in. Last summer, I tried an experiment. I bought a pair of overalls and brought them to wear during the work session. I figured if I was going to work on the railroad, I should look like a railroader. Check out the photo here of Rio Grande Southern 42 being turned on the Durango, Colorado, turntable. The railroaders have on boots, denim over-

alls, long sleeve shirts, hats and gloves. The men's faces represent the only visible skin.

Years ago, I was told that walking along railroad tracks was like walking onto a factory floor. Usually, factories have strict dress policies and safety requirements to minimize accidents and protect employees. The Friends are no different: each work session begins with a safety talk, and safety rules require the wearing of heavy boots, long pants, shirts, gloves and hard hats. Goggles or protective glasses should also be worn where power tools are being used. Thus far, the Friends have a remarkable safety record, and we would like to keep it that way. As an Architect, I spend lots of time on construction sites. I have noticed that different trades have different uniforms (and tools) to better help them in their work. If you are planning on attending a work session next summer here are some tips.

No matter the job, wear comfortable footwear with a heavy sole. I recommend steel toed boots. These protect against nails, glass and sharp objects that litter the yard ballast. I also wear athletic socks with some extra padding for added comfort.

I see jeans and T-shirts all the time on construction sites, but I recommend overalls. First, I wear them over jeans and a shirt as a first line of defense against dirt. Second, overalls have lots of pockets—big and small—and a loop for a hammer. Ever notice how you always need a pencil and a pad of paper for a note or dimension? Now you have a place for it. Also, you can layer your uniform, depending on your site. Someone in Cumbres might opt for heavier jeans and a shirt while an Antonito assignment might warrant shorts and a T-shirt underneath.

Painters always seem to wear white; if you are on a paint crew, consider visiting your local paint store and getting some white painter's pants. Again, these have lots of pockets and are made of durable materials.

I also purchased my own hard hat (mine cost about \$12). Following Keith Shostrom's lead, I purchased a Friends' bumper sticker, cut out the logo and applied it to the hat. Now, I have a hat that always fits, and it shows some pride too!

If you plan to do any kind of carpentry work, consider purchasing a tool belt. These range from inexpensive nail aprons to more elaborate leather pouches. It is great to have a selection of nails at hand when you are sideways and upside down working on that porch ceiling at Osier!

Also, remember that the lowest elevation on the Cumbres and Toltec is 7,888 feet at Antonito. Bring sun screen and a water bottle to fight the high altitude exposure to sun and dehydration. These are just as important as the clothes you wear and the tools you use.

Did my uniform experiment work? You bet. I wasn't as clean as Ralph—I think he is a better delegator—but I was lots cleaner than if I had worn jeans alone!



Robert W. Richardson photographed Rio Grande Southern 42 on the Durango Turntable on September 10, 1952. This turntable is similar to the one that was in Chama, immediately north of the brick roundhouse. The D&RGW removed the Chama turntable in 1940. Photo courtesy of the Denver Public Library Western History Collection.

LETTERS

Welshpool & Llanfair Railway

I have just enjoyed reading the summer 1997 issue of the C&TS Dispatch and was surprised to see letters about steam railways here in Britain. Like your correspondent Guy P. Combe of Oklahoma, my wife and I have the railroading disease, having ridden most of the steam railways in Britain and several in different states in America, but mostly those in Colorado.

Steam railways, either standard or narrow gauge have a unique place in our history and must be preserved for our heritage. One such line in Britain which is preserved but gets very little publicity or attention, yet is absolutely fabulous, is the Welshpool & Llanfair Railway in mid Wales. The W&L is 100 percent steam, burning real Welsh steam coal and using in its roster two of the original 1903 Beyer Peacock locomotives built for the 2-foot, 6-inch gauge line when it was opened. The line was devised, planned and built to get sheep, cattle and people, in that order, down from Llanfair Caerinion to the main line at Welshpool for the markets there and for markets further afield in the industrial midlands.

The W&L also uses locomotives from Belgium and France and a 1954-built loco designed for the ill-fated and short-lived railway in Sierra Leone—in fact, it uses some of their ex-coaches too.

Please mention the Welshpool & Llanfair Railway. It's original, varied, interesting and runs eight miles through beautiful Welsh Marches scenery and it's steam hauled with open veranda coaches. Hope to ride with you on the C&TS next year.

David R. Ashworth
9 Haley Close
Reddish
Stockport SK5 6YY
England



"Sir Drefaldwyn," French built 2-6-0T, Austrian conversion to tank loco.



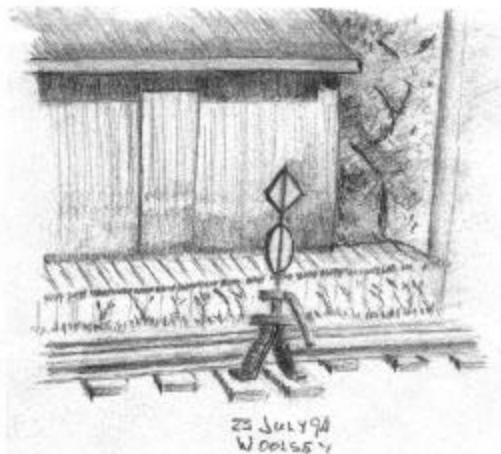
"Countess," original 1903 Beyer Peacock (Manchester) 0-6-0T in Great Western livery.

Uniform of Choice

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Also, after the work session, Laura Randall recommends washing your work clothes twice in hot water, then packing in a plastic bag for next year. Laura should know as she is Art Randall's wife, and Art is the dirtiest, greasiest, grubbiest guy in the Chama yard—and proud of it!

Keith lives in Denver, Colorado. His column appears regularly in the C&TS Dispatch. 🐾



Letters

Continued from page 7

Flagstaff & Middle Verde

Like other model railroader Friends, I devote a lot of time to my layout, the Flagstaff & Middle Verde Railroad. Five acres of 16-inch gauge and admittedly a little less accurate scale-wise than most real model railroads.

The F&MV, located 50 miles south of Flagstaff, Arizona, consists of 1/4 mile of main line (16-lb rail) and 350 feet of spurs and sidings (8-lb rail) spiked to 4 x 4 inch ties. Due to location, available time, rail weight and lack of labor, other than I, the main line and spur into the engine house required four years to complete. Naturally, a Golden Spike Ceremony was held and included all the usual for such an event.

Motive power at this writing is a single Miniature Train Company model S-16 steam locomotive. Two more of these engines will be added to the roster after their restoration. Some Friends may have ridden behind Miniature Train's very familiar EMD F-7, model G-16, in an amusement park. Also made for amusement parks, the S-16 is not actually a live steam locomotive—it is powered by the same Wisconsin gasoline motor, torque converter and transmission as

MT's F-7s. The S-16 is not a toy—engine and tender weigh 3,300 lb—and I get testy as hell if people turn up their noses because it ain't a real, live steam locomotive.

MT made 41 S-16 steam engines in the late 1950s and early '60s. During the same time, they made a bunch of 1/5 scale EMD F-7s copying (loaned) General Motors blueprints. Today, MT's steam trains and F-7s are still in great demand by both park owners and collectors. They are complex little locomotives, requiring a surprising amount of copper piping, gauges, wiring and gears. Simple to operate, but a real bear to restore. Well maintained (most are not), they provide rides in amusement parks operating day after day for 10 or more years before being overhauled.

Shown here is Martha Mackey's yellow Track Inspection Car, Buttercup, fabricated in the MACKEY SHOPS in Flagstaff out of pure imagination. Speed and direction are easily controlled with a tiller handle. Simplicity of operation.

The MACKEY SHOPS also fabricates all F&MV's rolling stock. The present roster includes a tool car, arch-bar truss-rod flat, drop-bottom gondola and Jordan spreader, all built to the same 1890s time period as represented by the locomotive. In addition, track tools, switches and switch stands, frogs, a turntable gantry, transition bars (to connect 8-lb to 12- or 16-lb rail), metal framework for the engine house and the huge list of other things necessary to the operation but not mentioned here were made in the Flagstaff shops as well.



Malcolm and Martha Mackey between engines 1 and 3 parked outside the engine house. All photos by Malcolm Mackey.



No. 1 (right) in the yard awaiting engineer and train orders.

Engine restoration began in 1972. Some parts made in 1960 were no longer available or far beyond my means. Even more difficult was determining how it was plumbed and wired. But there was a will, so there was a way. And everything is still working perfectly, including my version of link and pin couplers.

Sixteen-inch gauge has the same problems experienced by the biggies. Track bolts work loose, washouts, derailments and mechanical failures are always a concern. I try to keep a handle on the situation, sending the Track Inspection Car put-putting around the line, preventing most washouts by ditching with the Jordan spreader, plus frequent inspections and lubrication.



Trackage into the car barn. Note the stub type switch.

Scenery. The best comes from mama nature—mesquite, creosote brush, native grasses and some evergreens. Along with the naturals are the man-mades such as a mine hoist house (top 1/2 of a privy), operating turntable (ex-garage grease rack), telegraph and electric lines with those real blue insulators, stock pens of course, bridge, an open-air Depot and Railway Express Agency. Mile markers, 100 feet = 1 mile. Signs trackside use the names of acquaintances or from something that fits. Being an old, slow, railroad, running time to complete the loop is nearly four minutes.

Structures. Besides the engine house (3 stalls) is the Depot, wherein the weary traveler seeks shade, a two stall car barn protects rolling stock from the ravages of weather, a shed over the turntable garage hoist valves, handicapped ramp, piles of discarded ties and other stuff provide ambience.

Grade. There is a lot of up and down. After leaving the engine house, the first 400 feet are pretty flat. After crossing Gopher Gulch bridge, the next 500 feet include a 6-percent rise. Fifty feet of flat at the top (Hilltop), then downgrade back to the engine house. Total change top to bottom is 12 feet.

As a sideline during the winter, I write articles for *Live Steam Magazine*. I enjoy encouraging others to "go for it," by showing them all manner of things they can build themselves. My hobby probably costs as much as a yearly golf membership, a European vacation or a new sailboat. On the other hand, not all of us have the desire to play golf, travel or get seasick.

Malcolm Mackey
Flagstaff, Arizona

Restoration or Re-creation?

Keith Hayes brings up the \$64,000 question that all serious artifact restorers must face at some point in the restoration process.

My use of the word "serious" was intentional rather than accidental, since only a serious restorer would think to ask such questions as Keith poses. Just asking the question indicates a historical conscience that is not always a part of artifact restoration, even by so-called museums.

We can all recall personal anecdotes on so-called restorations that were really re-creations of the original artifact, i.e., the original was used only as a pattern to create a brand new item that matched the original in appearance but, depending on how faithfully the new duplicated the old, it may or may not have replicated the original joining techniques, materials, finish, or other original aspect.

Several projects that I am personally familiar with come to mind to illustrate this point: a friend of mine rescued a derelict 36" gauge Porter 0-4-0 saddle tank steam engine years ago in Washington State with the express purpose of rebuilding, or rather "creating," an entirely new locomotive



Martha Mackey on Buttercup, the Track Inspection Car.



Jordan spreader, a must for preventing washouts.

crafted in his own image. After the original boiler, saddle-tank and steel cab were tossed in the trash, the only remaining original parts were the wheels, frame and cylinder saddle. Everything else, including a new trailing tender, was brand new. The final product resembled a typical 1900-era Hawaiian plantation engine. Although the original "artifact" is gone, it was never intended to be a historic restoration in the first place.

The second project was intended to be a historic restoration but became, in the end, an acceptably accurate re-creation. A nonprofit, volunteer-based museum had acquired the remains of a small, wood-frame country railroad depot which had been retired by the railroad 30 years before. Shortly after retirement, it was acquired by a private party, dismantled and moved about 10 miles, where the building was reassembled on a new concrete slab floor without much more to guide the process than a few photos taken before the depot was dismantled.

When the museum acquired the building years later, it had sat unused and unoccupied for several years on private property and vandalism was becoming apparent. With the help of Federal Block Grant funding and a local municipal-

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Letters

Restoration continued from page 9

ity, the old depot was finally returned to its original location to await the "restoration" process.

After three moves (the railroad company had moved the building across the tracks and added to it in 1916), and with no historical documentation to reveal the original placement or nature of some of the structural elements, or whether some of the original building elements were replaced when the building was retired and reassembled, an authentic "restoration" appeared problematic.

To compound the issue, much of the remaining wood in the structure suffered from rot, termite damage, weathering, vandalism, moving damage, etc. Also, as a condition of the Block Grant funding, the building had to be handicapped-accessible with a handicapped restroom, and open to the public. The restroom, although not a part of the original buildings was required.

In the end, almost all of the exterior wood siding and most of the original structural members were tossed in favor of new material. All new siding and interior paneling were provided, carefully milled to replicate the original. Original paint chips found under successive paint layers were used to determine original colors. An old floor plan, photos, and other historic descriptions were used to replace elements that had long ago disappeared. The building looks essentially as it did when it was newly rebuilt in 1916. The project, performed largely by museum volunteers over a two-year span, was the recipient of the American Institute of Architects annual "Orchid" Award for historic preservation.

Then there are those—like John White, Curator Emeritus of the Smithsonian Institution—who will sometimes make a case for leaving the artifact in the condition as found, under certain

circumstances, regardless of how poor that condition may be. A common example of the latter is the rusty spikes we have all picked up from some long-abandoned roadbed. Do you know of anyone who has tried to restore the remains of the spike to its original cross-section and appearance?

I own the body of an all-wood open coach/excursion car, built by Hammond in 1887. When I found the car years ago on a ranch, it was being used as a cabin, perched on wood and stone blocks about 12" off the ground. The wood underframe and truss rods, roof, clerestory, and the car end panels with intact window glass are basically



A major project of the Friends has been the restoration of the Car Inspector's House at Cumbres. Here, volunteers are replacing the roof in June 1991. Art Nichols photo.

sound. But the letterboards and the posts supporting the roof eaves on each side of the car are in very poor condition and suffering from rot and insect damage. The posts, although in poor condition, reveal the outline and the attaching holes for the original bronze grab iron supports. This information, coupled with an old photograph of the hardware, will enable me to replicate the original item almost exactly. It is clear the old posts were solid oak, as the new replacements will also be. The long-gone steps for the platforms will be replicated exactly, since I luckily found an identical step from a sister car before it was scrapped years ago. I was also lucky to find one complete set of platform railings for one end of the car, which are in reusable condition. My

plan is to restore the car for display, so I intend to preserve as much of the original car as possible, and carefully document the portions I replaced for the benefit of future researchers. I have gradually compiled detailed, dimensioned drawings of the car. Items that will have to be replicated, such as the end platforms and the trucks, will be thoroughly researched and drawings made to aid in replication.

Which brings me to the three ex-D&RGW flatcars 1033, 1515 and 6708. Since Keith didn't specifically say that the cars were generally complete with trucks, brake rigging, couplers and draft gear, I'm assuming that this is more or less true. That being the case, my suggestion would be to restore all three cars as flatcars, since that was the final use made of them by the railroad before being retired. And I agree with Keith that they are authentic interpreters of the railroad's legitimate attempt to adapt, modify and re-utilize existing resources as necessary to protect the "bottom line" on operating expenses.

In the case of these three cars, if the wood parts are trash, replace the tossed parts with wood members matching the original in every way, even to the wood species if possible.

Every drilled hole in the original should be replicated in the new part, whether that hole still has a function or not. All aspects of the original part should be carefully documented for the file and to aid future researchers, just as an archaeological find would be, before the item is disposed of. Also carefully documented should be the repairs or alterations made to the original artifact, again to aid future researchers. Future historians—our sons and grandsons and their sons and daughters—should know that when they are studying the underframe of one of these cars in 2025 or 2050, some of the timbers are in surprisingly good shape for a 150-year old railroad car because of the restoration work done by volunteers in 1998 and not because the railroad had a secret potion



Letters

Restoration continued from page 10

to prevent rot and decay in 1924. It is also important that these researchers of tomorrow know that the new parts were almost exact copies of the replaced parts, and therefore were representative of what the replaced part looked like.

In this way, the structural integrity of the cars can be enhanced without destroying the historical, artifact and research value. And, no, I have no problem with using modern pressure-treated wood products to replace destroyed wood. I think that makes good sense if the money is available.

I hope to make a work session one of these years. Best wishes to all of the hard working volunteers who make a difference. And I think you do a great job with the *Dispatch*! It's a class act by any standard.

*Dick Pennick
Steam Fireman/Brakeman
San Diego & Arizona Railway
San Diego, CA*

COMMISSION HIGHLIGHTS

*By Leo Schmitz—Executive Director,
Cumbres & Toltec Scenic Railroad
Commission*

Chama, New Mexico, November 14, 1997. George Bartholomew, president of the C&TS RR Corporation and operator of the railroad, announced that to date for 1997 there had been 60,719 passengers compared to 54,829 for the same period in 1996. This is a record number of tourists, and Christmas trains scheduled on the 6th and 13th of December will add to the total count.

Congressman Bill Redmond has requested the assistance of Chama in obtaining economic information on tourism in northern Rio Arriba County. The railroad assisted in this effort by distributing and collecting surveys from passengers. Of the 370 respondents, 43 did not stay in Chama when they rode the train. The average stay in the village was 1.27 days. The operator wants to encourage people to stay longer by offering additional activities on the railroad.

Bartholomew described how he wants to provide living history interpretations and demonstrations at the railroad by working with the Friends in their effort to provide docents to bring the history to life. He envisions sheep loading demonstrations at the stock pens and an antique sawmill demonstration with a stationary steam engine for power. In addition, Bartholomew would like to

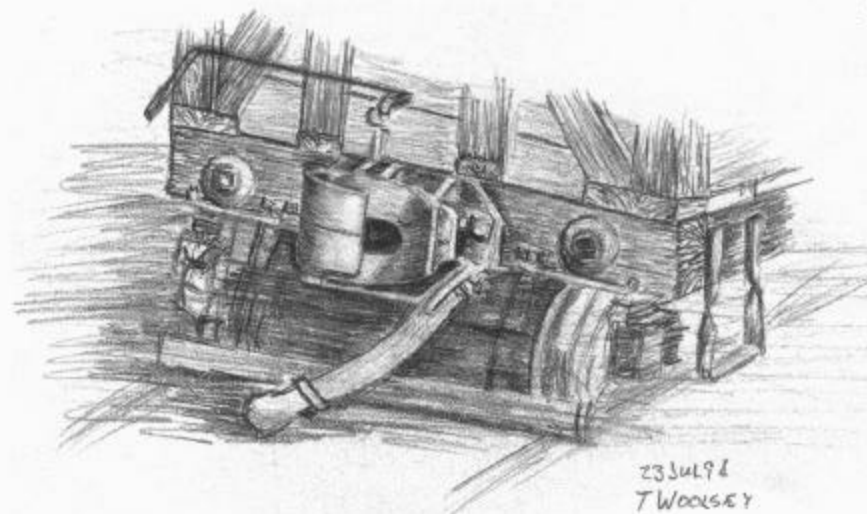
have antique trade demonstrations such as loom weavers and a blacksmith. These artisans would demonstrate their crafts on railroad property and be allowed to sell only what they produce on the property. A blacksmith is willing to come try this in 1998 and will pay a 10 percent commission on his sales, the amount to be split equally between the railroad commission and the operator.

The commissioners approved the demonstration booths being established on railroad property subject to the 10 percent commission and the restriction on items to be sold, contingent on clearance from the historic preservation offices in both states and subject to review in one year.

The brick restoration on the Chama roundhouse has been completed. Also, temporary supports have been installed under the Osier water tank, a concrete box has been installed with individual water line shut-offs for the buildings at Osier, the wheel lathe has been delivered and installed in the Chama shop, and the vertical boring mill purchase is on hold because of the high cost of transporting it from California.

The Chama Shop Waste Water/ISTEA project is under review by the New Mexico Surface Water Quality Bureau. The New Mexico Ground Water Quality Bureau reviewed the project and took water samples. While there were some contaminants in the water, they were within acceptable limits. The surface water bureau is reviewing the oil/water separator and indicates that a separate permit is required from the US Environmental Protection Agency.

*Officers of the commission
Bob Lynn, chair; Wayne Quinlan,
vice chair; Medardo Sanchez,
secretary; and Lewis Entz,
treasurer.* 🐾



**1998
SCHEDULE OF EVENTS**

May 2, Saturday
Preseason Railfan Charter

May 16, Saturday
Opening Day

June 15, Monday-June 18, Thursday
Volunteer Work Session A

June 19, Friday
Annual Dinner and Meeting

June 20, Saturday
Railfan Charter

June 22, Monday-June 25, Thursday
Volunteer Work Session B

June 29, Monday-July 2, Thursday
Volunteer Work Session C

August 3, Monday-August 7, Friday
Mini Work Session

August 8, Saturday
Tenth Annual Moonlight Train

October 18, Sunday
Planned Closing Day



Santa Claus (Tom Cardin) in his sleigh pulled by two purebred horses met the Christmas train with engine 497 at Dalton, four miles east of Chama, on Saturday, December 6. Santa walked through the train talking with each and every child. Hot spiced cider and homemade cookies awaited the passengers when they returned to Chama. A Christmas train with 463 was also operated out of Antonito a week later. Robert Royem photo.



**Friends of the Cumbres & Toltec
Scenic Railroad, Inc.**

5732 Osuna Road NE
Albuquerque, New Mexico 87109

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