



C&TS Dispatch

Vol. 8 No. 4

Winter 1995

Chama, NM

Water Tank Restored

by John D. Rupley

I was told a story about a railfan from Texas who drove all day and all night to Chama at the end of the 1994 season, hoping to get there and see the famous double-spouted water tank before it was dismantled. When he drove into the yard and saw the remains of the tank on the ground, he thought that all was lost — the wrecking hammers had deprived future visitors to the Cumbres & Toltec Scenic Railroad of a valuable piece of history.

Well, not so! Happily, the railfan learned that the report that fueled his long dash to Chama was only slightly accurate. Yes, the water tank came down, but it has been restored, complying with all historic preservation rules and regulations. Once again it stands sentry to the north end of the Chama yard.

While the tank was being restored between the 1994 and the 1995 tourist seasons, water was still needed, and it was provided by a strange configuration of pipes and cables attached to two water tank cars placed on the coal tippie tracks near the ash pit. This arrangement was the brain child of John Bush, Assistant Manager and Chief Mechanical Officer of the C&TS, and displays the continuation of railroad design theory: "If you don't have it, invent it and get back to work!"

Standard Gauge on Narrow Gauge

The Chama water tank is a modified standard gauge design with a shorter base to accommodate the narrow gauge engines. Capacity is about 50,000 gallons (the capacity of most narrow gauge tanks was 30,000 gallons). The two spouts on the Chama tank are unusual be-



See *Water Tank Restored*, page 4 Restored Chama water tank. May 1995. Photo by Art Nichols.

Last May, while John Rupley and I were sitting on a south-facing, snow-free hillside near Cresco waiting for rotary snowplow OY to come into view as it opened the railroad, we talked about the Chama water tank, which had just been restored. John had been Historic Preservation Architect for the project. I asked him to write an article about the work, and he agreed. The page-one article in this issue is John's story of its beautiful restoration.

Steve Schroeder and I enjoy bringing you articles such as this

one, and we certainly get a lot of satisfaction in producing the C&TS Dispatch. Now we could use some help. If you have experience in editing, designing, and laying out publications such as this one; if you can make a time commitment over the long term, and would like further information, please write to me, Arthur Nichols, at 1307 45th Street, Los Alamos, New Mexico 87544. My e-mail address is asn1307@aol.com

— the editor

C&TS Dispatch

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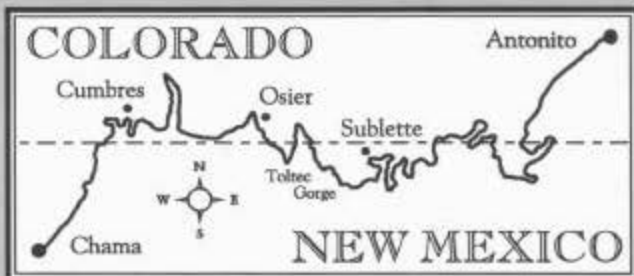
Please write the editor at
1307 45th Street, Los Alamos, NM 87544
e-mail: asn1307@aol.com

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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 Kyle Railways, Inc. 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
Denver & Rio Grande Western Railroad — 1921 to 1970
Cumbres & Toltec Scenic Railroad — 1970 to 1995

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PRESIDENT'S COLUMN



It feels odd to be the one writing this column, having been a member of the Friends since its beginning in 1988 and a volunteer in a number of Friends activities and seen Bill Lock's name in this space since the beginning. I think the first thing I should do is introduce myself. I am a former Peace Corps Volunteer, former public school teacher, and currently a solo practitioner attorney in Claremont, California.

The themes of service through volunteerism and organizational leadership have been present in my life from my earliest school days. In high school and college I was involved in model legislature activities; in my twenties I was a board member and president of my church fellowship; in my thirties I was a member and chair of a city commission and a board member and president of our local Camp Fire council; and in my forties I was a team leader and division chair in the allocations activities of our local United Way.

My attachment to the Friends came through my husband, board member Howard Bunté. He went to his first work session because he loves trains; he returned and persuaded me to come as well because of the people he met. I went and kept participating because I was caught by 100-year-old machinery that still runs or has been lovingly coaxed back to life, the beauty of the mountains, and the people who care so much about this railroad. I have come to care about them very much and also about something less tangible, the organization that provides them with the way to come and contribute their passion and skills to what they care about. That is how I came to accept the adventure of being the second president of the Friends.

The organization has grown steadily over the years; it now stands at about 1,200 members, who come from almost every part of the U.S. and nine foreign countries. We have just completed our most productive summer work program with the largest group ever of volunteers. Planning is well underway for an equally ambitious program for next summer.

One of the most remarkable things about the Friends is that essentially all of the work that keeps us functioning is done by volunteers. The expansion of our accomplishments and our ambitions is directly related to the expansion of involved volunteers, and this past year has seen quite an expansion.

Five members of the projects committee took on new levels of responsibility for planning our summer work sessions; thank you Roger Breeding, Ralph Flowers, Don Metzler, Drake Rice, and Bob Seller.

Twenty-one team leaders took on a greater responsibility for planning the materials and budget for their projects, recording their work, and helping us plan for next year; thank you Roy Bliz-

See *President's Column*, page 3

1996 Schedule of Events

Opening Day The railroad opens its season on May 25, 1996. In the weeks leading to opening day, the railroad will be assessing whether Rotary OY will be needed to clear the tracks. The Friends like to keep members abreast of such news but the decision is often made on such short notice that it is difficult to get the word out. This year we'd like those of you who want this information to send us a stamped, self-addressed, business size envelope that we can hold for that purpose. Our address is 5732 Osuna Road NE, Albuquerque, NM 87109.

Moonlight Train Friends' summer activities begin on June 29, 1996, with the Eighth Annual Moonlight Train. The Moonlight Train is a special way to enjoy the trip from Chama to Osier and back. Leaving the Chama yard at 3:30 p.m., we arrive at Osier in time to enjoy the sunset and a steak dinner. The ride back will be by the light of an almost full moon. Last year the weather was clear and riders were treated to a spectacular return trip.

Work Sessions The Friends' work sessions this year will stretch out over three weeks in the month of July. The earliest session (with a limited number of volunteers), July 17 to July 19, will be for beginning two projects that will require the longest time — reroofing the Cumbres section house, and window and molding work at the Osier section house. The Railroad Commission has been awarded grants for these projects.

The next session will be from July 22 to July 25 (with a possible half-day on July 26 at the option of team leaders).

The last session will be from July 29 to July 31.

Annual Meeting The annual meeting of the Friends will be on the evening of July 26.

Location and program will be announced at a later date.

Internet Addresses

Matt Hutson, Glenwood Springs, CO
mhutson@interserv.com

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

Corrections

In the Fall 1995 issue director Warren Ringer's e-mail address was incorrect. It is: wcringer@aol.com

In the same issue, Carl Turner's service on the C&TS Railroad Commission was reported incorrectly. Carl served as a commissioner from 1982 to 1988 and 1991 to 1995.

Volunteers Wanted for NG Convention

The 1996 Narrow Gauge Convention will be held in Durango, Colorado, September 18-21. As in previous years, the Friends will

Members Roy Blizzard (right, top), Don Smith (middle), and Terry Woolsey (bottom) represented the Friends at the annual Narrow Gauge Convention held at Valley Forge, Pennsylvania, from August 16 to 20. Membership brochures, work session photos, and publications were displayed on the Friends table, and Roy, Don, and Terry report that many people stopped and wanted information about the C&TS and the Friends. More than 300 brochures were distributed and many publications were sold. The Friends will be represented again at the 1996 convention.

be represented at this national event, and volunteers are needed to help at the Friends table. Interested members should write Sam March, 4744 S. Oray Way, Aurora, CO 80015, or call him at (303) 699-8329. He can also be reached by e-mail at: 71042.2317@compuserve.com



President's Column

Continued from page 2

zard, Roger Briggs, Richard Caldwell, Mary Cardin, Ralph Flowers, Wayne Freeark, Bob Ground, Wade Hall, Keith Hayes, Jim Herron, Malcolm Mackey, Don Metzler, Art Nichols, Ted Norcross, Art Randall, Drake Rice, Marvin Sandmire, Bob Seller, Cal Smith, Fred Springer, and Randy Worwag.

Thirteen chroniclers are currently working on their post-session tasks; thank you Andrew Dickard, Jim Gross, Glenn Hall, Bob Hayes, Jacquelyn Hirsch, Roland Hirsch, Frank Maly, Joan Sands, Joyce Shostrom, Keith Shostrom, Orion Steen, Brian Svikhart, and Ed Walton.

Twelve families, whose help was featured in the Spring 1995 issue, made the task of acknowledging member contributions easier; thank you Abbotts, Knights, Mackeys, Marches, Reeds, Norcrosses, Sandmires, Shostroms, Storys, Kepners, Van Hoosers, and Woolseys.

And finally, we have seen the appearance of Keith Hayes, Ed Walton, and Earl Knoob as regular columnists for the *C&TS Dispatch*.

Between now and next spring, we will see the results of a number of assignments given to members who told us they wanted to do something more to help the Friends. I look forward to sharing their stories with you in future columns.

—Terri Shaw



Chama water tank before restoration. September 1994. Photo by George Swain.

Water Tank Restored

Continued from page 1

cause generally engines are prepared on a single-sided service track. The Denver & Rio Grande had several places in addition to Chama where the engine traffic necessitated water tanks with two spouts facing opposite tracks, for instance, Durango and Alamosa, Colorado.

The Chama tank is no small structure. When loaded with water it weighs near the combined weight of two K-36 engines and tenders (over eight C-16s loaded). Each of the twelve columns carries a weight equivalent to one of the new passenger cars. The roof weighs over 10,000 pounds all by itself.

Constructed in 1897 (the round roof helps to date it before 1900), the tank was one of only a few structures not destroyed in the fire of 1899. By 1902 the tank in standard use outside Chama had the cheaper octagonal roof design that can still be seen on many old railroad tanks. The Chama tank has ra-

dial rafters and curved fascia boards at the roof line. A 1905 photo showed that the tank was a dark red color, as were most structures on the railroad. By 1928 the ladder on the north side had been removed but the shingle roof was still intact. Photographs from the 1950s show the flying Rio Grande logo on the water tank; it was much later that the Rio Grande herald was placed on the tank. For historical reasons the flying logo is on the restoration, but "Cumbres & Toltec" replaces "Rio Grande."

Deterioration Sets In

The tank was leaning in the 1960s — photos show additional supports on the south side. Photos from 1968 show considerable water leakage all around the tank and, in 1981, in an effort to keep supplying water and to save the structure, a steel liner was placed in the tank with a capacity of slightly under 20,000 gallons. It's amazing that the tank lasted the

Photos by John D. Rupley and used with permission (copyright 1995 — Rupley Collection) except where noted.

thirteen years between 1968 and 1981.

The primary reason for the restoration was the imminent danger of the water tank simply collapsing! Eleven of the twelve support post timbers were severely rotten, and investigation revealed that inside most of the columns there was flowing water. Ten of the columns already had over 12 inches of the bottom portion removed and were standing on loose wood blocks. The 3"x12" boards, that look like a base of the column, were simply covering the not so structurally sound repair. The 3" timber floor of the tank had dried and begun to rot, and the staves (the vertical wood pieces of the tank) were loose and twisting the entire structure. The noticeable lean was becoming more and more pronounced. The X bracing was coming apart, and the main beams and chine joists, the wood members that hold up the tank floor, showed severe rotting.

In the 1970s and 1980s, with only a few steam engines in operating condition, the



Dismantled water tank on the last weekend of the season. October 15, 1994.



Main beams and chine joists (the wood members holding up the tank floor) showing severe rotting. October 15, 1994.



Main beams and chine joists of the restored water tank. June 1995.



An original valve installed inside the restored barrel. June 1995.



Columns with 3- by 12-inch boards at their bases. September 1993.



Flat bands with bolted buckles and round bars on the water tank barrel before restoration. September 1993.



Interior of the new barrel (note the smooth redwood finish). June 1995.



Temporary watering arrangement in the Chama yard on the coal tipple tracks south of the water tank. September 1994.



Gallows-type framework for raising and lowering the water spout and opening and closing the interior valve. June 1995.



Hinge arrangement of the spout on the face of the water tank. June 1995.



View to the north in the Chama yard before the restoration. September 1994. Photo by George Swain.



Restored water tank. June 1995.

reduced capacity from the steel liner was quite sufficient. But in recent years, with six steam engines hustling about the yard and triple headers common toward the end of season, the tank was falling short of its required duty. A triple header could need as much as 27,000 gallons of water, and what about those snow trains we love to see — that is the peak of thirsty equipment!

Funding and State Involvement

Funding for the restoration of the water tank came from the states of Colorado and New Mexico, with each contributing \$32,870, and the C&TS Railroad Commission, which contributed \$85,696, for a total of \$151,436.

As with any project on the railroad, agreement by the State Historical Preservation Officers (SHPOs) of both Colorado and New Mexico is required. In preparing the documentation for the SHPOs, measured drawings were made and compared to

numerous 1890s drawings of Denver & Rio Grande water tanks; countless photos in publications were studied, as were photos taken by the author showing the deterioration; persons who had worked on the railroad in pre-C&TS days were interviewed; and paint samples were collected from structures along the railroad. All in all, there was constant communication on many matters with the SHPOs.

Restoration

The Chama tank is one of very few that retained the original flat banding on the barrel with bolted buckles. John Bush uncovered a 1920s' memo from the Bridge and Buildings crews (who built the tanks originally) that stated round banding should replace the flat type because of excessive rusting of the flat style. Apparently there had been noted failures. The bands on the Chama tank were in serviceable condition and were replaced ex-



Ready to cut the ribbon at the dedication ceremony. From left: Leo Schmitz, Robert Kaulakis, Joe Vigil, Lewis Entz, Carl Turner, Spencer Wilson, Wayne Quinlan, Joe Chato, John Rupley and Joshua Rupley, Jim Kriess, Lynn Cecil, and John Bush. June 23, 1995. Photo by Tom Cardin.

actly as we found them. The round bars were also on the tank and are more noticeable now that the restoration is complete.

The valves in the tank are original, as is the entire roof structure. Most of the bracing that looks like the letter X is original, as well as some other selected timbers. The original gallows used to raise and lower the spouts and the depth gauge were repaired and reinstalled. The spout is hung by tow chains forming the "hinge" condition at the face of the tank. A gallows type framework conceals counterweights (one on each side); this allows the heavy steel spout to move easily and remain in position when released. A center rope (lanyard) threads through a pulley in the roof to an L-shaped lever mounted on the floor of the roof framing. A long rod is connected at the lower end of the L bracket, the other end plunges into the deep water to the lid of the valve. Pulling on the rope rotates the L, thus pulling up on the rod connected to the valve. The valve only opens a few inches, but that is more than enough to fill an empty tender in a matter of minutes.

Each stave of the barrel is individually milled, notched at the bottom to fit tight onto the floor and tapered to the top, as the top and bottom radii of the tank are different. The fit is so tight that braces were not needed to hold the tank together as it was erected (the original tank had small redwood dowels in each stave to hold them together). Since redwood swells in water, the filled tank stopped leaking after a few weeks (similar to a hot tub).

The plans on pages 8 and 9 give information on the restoration of the water tank.

Ready for Service

When I first saw the tank with the shiny new coat of paint, it looked like a plastic kit placed on an old model railroad. But passing trains have already removed the "new," and once again the water tank proudly stands ready to service the next tender.

The restored Chama water tank is a tribute to all those who took part in the process. Red Mountain Engineers, Inc., of Santa Fe, were the engineers of record; I worked directly for them on this project, as well as on others. Robert Kaulakis of Blue Lake Builders, Taos, was the general contractor, and International Tank & Pipe Company of Clackamas, Oregon, provided the redwood tank staves and floor. The strong commitment of Kyle Railways, Inc., to historic preservation and the continued support for this work by the Cumbres & Toltec Scenic Railroad Commission ensured the success of the project.

Where are all the narrow gauge double-spouted water tanks from years gone by? There is one ... in Chama on the Cumbres & Toltec Scenic Railroad.

John is a member and former director of the Friends and was the Historic Preservation Architect for the Chama water tank restoration. He is coauthor of the recently released computer CD "Cumbres & Toltec Multi-Media Adventure Kit," published by Sandia Software of Albuquerque, New Mexico.

Water Tank Dedicated

On Friday, June 23, 1995, with a crowd of more than fifty persons in attendance, the new Chama water tank was dedicated. Four Cumbres & Toltec Scenic Railroad Commissioners and their executive director, Leo Schmitz, representatives from Red Mountain Engineers, Blue Lake Builders, and Kyle Railways, Inc., gathered to cut the ribbon. Before the ribbon-cutting ceremony, Commissioners Carl Turner, Spencer Wilson, Lewis Entz, and Wayne Quinlan thanked the states of New Mexico and Colorado; John Rupley, Historic Preservation Architect for the project; Robert Kaulakis, owner of Blue Lake Builders; and the employees of the railroad for their cooperative effort in restoring the water tank.

Carl Turner stressed the importance of working together for the preservation of the C&TS so that our children, grandchildren, and great-grandchildren will be able to enjoy this magnificent railroad. Representative Entz praised all who contributed to finding the monies necessary for the project, as well as the efforts of those persons who helped complete the restoration.

John Rupley and Joe Chato, owner of Red Mountain Engineers, expressed their pride in being part of the project. Robert Kaulakis thanked his crew for their dedication to the project. Lynn Cecil, president of Kyle Railways, Inc., said he was happy to see the tank completed and in operation.

The water tank was photographed and admired by the crowd, and there were many favorable comments about the tank's appearance, as well as many congratulations to the people responsible for its restoration.

— Leo Schmitz

"FLYING" CUMBRES & TOLTEC LOGO, REPLACING ORIGINAL "FLYING" RIO GRANDE, ALSO PREVIOUS SCHEMES INCLUDED LOGOS.

WATER LEVEL INDICATOR LOCATED ON THIS SIDE ONLY

CENTERLINE OF WEST TRACK

ROOF HATCH AND LADDER

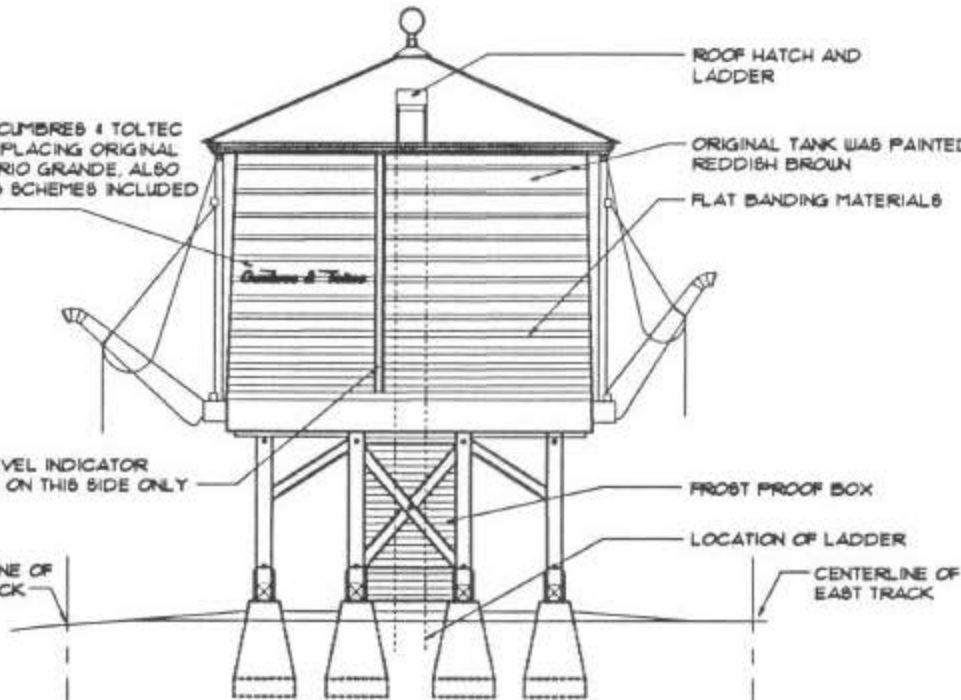
ORIGINAL TANK WAS PAINTED REDDISH BROWN

FLAT BANDING MATERIALS

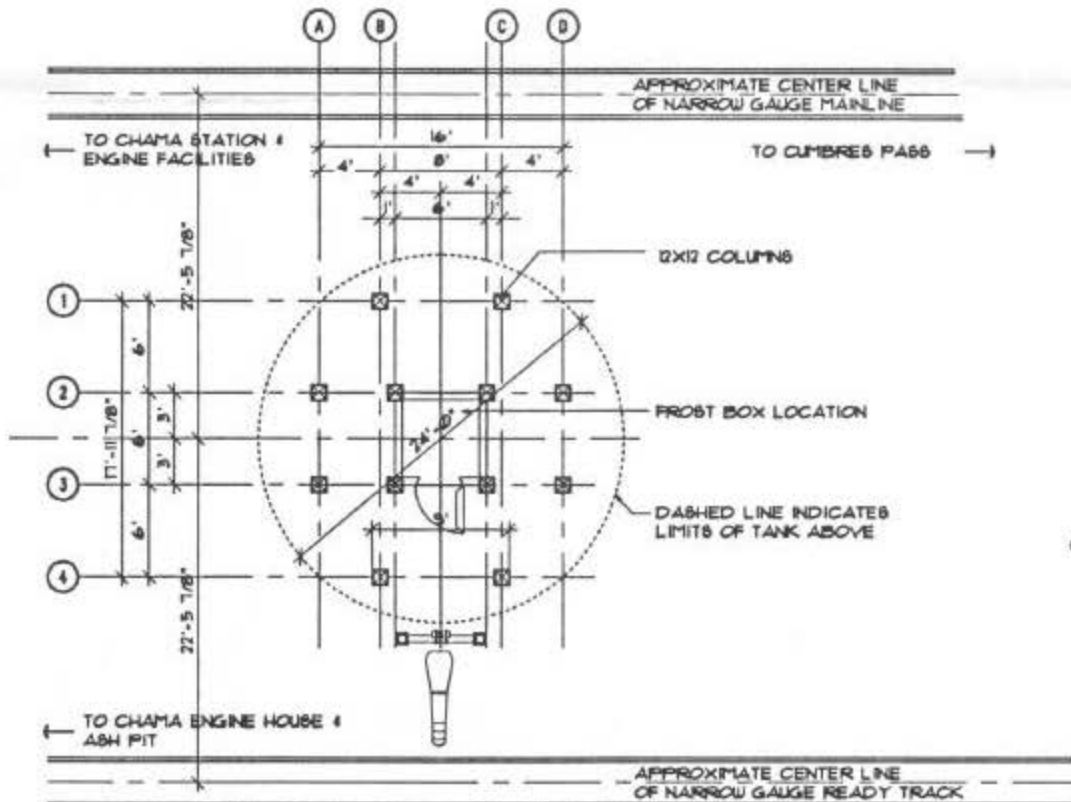
MAIN CONSTRUCTION

COLUMNS
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MAIN BEAMS
CHINE JOISTS
PARAMETER BEAM
CENTER SUPPORT
GALLOW SUPPORT
GALLOW WEIGHT BOX
ROOF RAFTERS
ROOF DECK JOISTS
BARREL STAVES*

* STAVES MEASURED REMOVED AT THE WIDTH OF THE BEVEL CUT.
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* THE 16' LONG STAVES THE



SOUTH ELEVATION



TOWER FOUNDATION PLAN



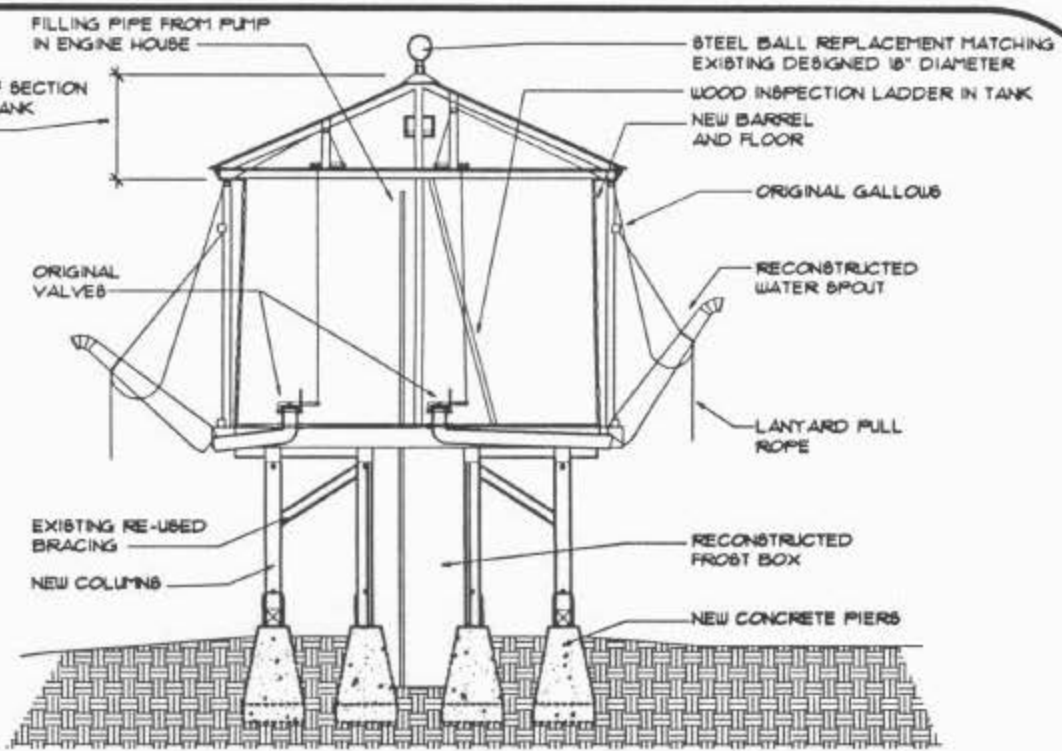
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Photo Copy To equal one to have drawn proper scale model building

drawn by John copyright

Cumbres & Toltec



EAST - WEST SECTION

MATERIALS

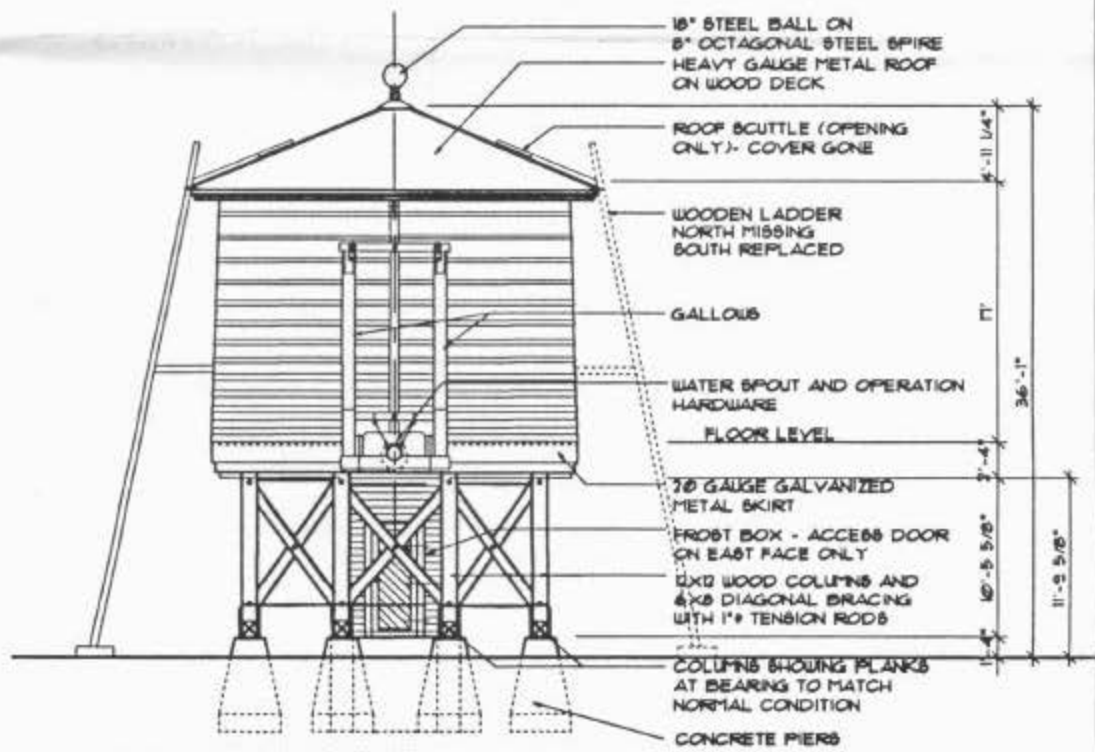
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 DIAMETER WAS 22'-5".

SCALE LINE
 N Gauge

Use lines
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D. Rupley
 10/1995



EAST ELEVATION WEST ELEVATION SIMILAR

DOUBLE SPOUTED WATER TANK

NARROW GAUGE NEAR AND FAR: NO. 4

by Earl Knoob

Passengers

Well, the 1995 season is over and it's time to look forward to somewhat quieter times. The official passenger counts aren't completed as of this writing, but it looks like we will be a little shy of 60,000 passengers. I came up with 60,288 but the accounting department shows about 59,700. Ridership was a real roller coaster this year. As of the third week in August, we were about 1,200 ahead of 1994. Late August and early September were very slow, and we lost considerable ground compared with last year. The fall colors were very late this year, and our normally very busy weekend days in late September were a bit of a disappointment. By October 5 we were almost 800 passengers behind last year. The last ten days of the season were very busy to say the least. Some daily totals were as much as 300 passengers ahead of the same day a year ago. We ended up (by my count) over 1,850 ahead by October 15. As opposed to last year, we had wonderful weather. Also, the railroad placed an advertisement in the Albuquerque Balloon Fiesta activities publication as another thing to do while in the area. During the fall "Stock Rush," we ran five triple headers, including one on a Friday.

497

On Saturday, September 30, engine 497 returned to service after an extended trip through the shop, which included new boiler tubes, front and rear boiler tube sheets, new piston and valve rings, and replacement of its Chinese nonlifting injector on the left side with an old-fashioned Sellers lifting injector (taken from 492). The Chinese injector was installed by the Durango & Silverton (D&S) when they had 497. The nozzles inside the injector had worn out and there were no replacement parts in this hemisphere, so instead of paying a large amount of money to fix it, we put the old style back on. So far the old one works like a champ. The Chinese injector was part of a plan by an individual back east to bring Chinese steam locomotives and repair parts to this country for use on U.S. steam railroads. In addition to locomotives, there were to be injectors, air compressors, and steam-driven dynamos (for headlights and so forth). I believe there were two injectors imported — one lifting and one nonlifting. The lifting injector went to the Grand Canyon Railroad, where it didn't live up to its expectations. The nonlifting injector went to the D&S, which hung it on the 497.

For the uneducated a lifting injector is mounted above the level of the water in the tender — usually on the side of the boiler either ahead or inside of the cab — and actually pulls water from the tender up into the injector before pushing it into the boiler. A nonlifting injector is mounted below the water level — usually below the cab — and uses gravity to get water into the injector before pushing it into the boiler.

The 497 definitely pulls a lot better with its new piston and valve rings. Gone also is the wheeze that came up the stack when it started a train. The 497 has always been a loud engine and with the new rings it's even louder.

Fans from UK

From October 1 to 4, we entertained a group of British railfans who spent four days riding special charter trains. The morning of the first day they had a short freight train from Chama to Lobato and back. In the afternoon 463 and 497 doubleheaded a 16-car Cumbres Turn, meeting the afternoon passenger at Cresco siding. The next day engine 463 led another 16-car train with 489 cut in the middle to Cumbres, where 489 was cut out and 463 ran on to Osier and back to Chama. The third day found 489 leading a 12-car train out of Chama, adding the 6 UTLX tank cars at Cumbres and running all the way to Antonito for the night. On the final day 497 brought the train home to Chama. It was an exhausting but fun four days.

While eating dinner in Antonito on the third day, I overheard two British fans talking about all the places they had been in the world to see steam, and to my surprise they said the

C&TS was the best place in THE WORLD. Now don't that make ya feel proud?

I might add that several members of the British tour saw 463 performing before the television cameras while promoting the British candy product that was filmed here during the work session in July. One tour member insisted we do a runby at the exact spot where one was staged for the commercial.

Durango & Silverton

The little Eureka & Palisade no. 4 made a return trip to the Durango & Silverton in late September. It showed up on Friday, September 22, and stayed through October 2. The first run was made on Monday the 25th, and most of the week was spent running between Durango and Cascade Wye, although they did sneak up to Silverton a

D & S W Form 3250
Rev. 2

PUEBLO OCT 15 19 54

TRAIN ORDER NO. 67

To CAE ENGS 498 492 AND 491

CAE ENGS 495 492 AND 491

CAE ENGS 492 AND 491

At CHAMA X Opr. M.

ENGS 490 AND 493 RUN AS 2 EXTRAS CHAMA TO ALAMOSA
ENGS 492 AND 491 HELP EXTRA 498 EAST CHAMA TO CUMBRES THEN RUN AS
2 EXTRAS CUMBRES TO CHAMA AND MEET EXTRA 493 EAST AT LOBATO
AFTER 2 EXTRAS 492 AND 491 WEST ARRIVE AT CHAMA ENGS 492 AND 491
RUN AS 1 EXTRA CHAMA TO LOBATO AND HELP EXTRA 493 EAST LOBATO TO
CUMBRES
AFTER 3 EXTRAS 495 492 491 AND 493 492 AND 491 EAST ARRIVE AT
CUMBRES ENGS 492 AND 491 RUN AS 2 EXTRAS CUMBRES TO CHAMA

IN E

CONDUCTOR, ENGINEER AND REAR TRAINMAN MUST EACH HAVE A COPY OF THIS ORDER.

Made W. A. H. Time 1:33 P.M. W. A. H. Opr.

Train Order, October 15, 1954.

couple of times. One night they reportedly spent the night camped out at Cascade. Pentrex Video reportedly helped underwrite the project. On the 30th it made a special trip to Silverton and back. The public was invited to ride for \$125. The next day a trip to Cascade was offered for \$100. I met a couple of folks who went for the Silverton trip and had a great time. Reportedly there were few takers on the Cascade trip on Sunday.

Don't feel bad about not knowing anything about the Eureka's visit. I live only 108 miles away and I had a tough time finding any information about it. Most of my information came from calling a friend who happens to be the dispatcher in Durango — and most of the time he was in the dark! The details concerning the two trips for the public weren't decided until mid-week. Because of the impending arrival of the British tour, I couldn't get the time to get over there, so the above comes from various sources who were present.

I have heard that the D&S will be running again this winter, the round trip to Cascade Wye leaving at 10:00 a.m. Power this winter will probably be 480 and one of the K-28s (476?). The winter run is just the thing for those needing a winter narrow gauge steam fix.

Train Order

I recently received a bunch of old train orders from the D&RGW dating from the 1940s and 1950s. Some of them are pretty simple, others are delightfully complex, giving an idea as to just how busy it was around here at one time. I submit to you a course: "Train Order Reading 101" (suitable for college credit). The order, shown on page 10, reads as follows:

PUEBLO OCT 15 1954

TRAIN ORDER NO. 67

To: C&E ENGS 498 492 AND 491

C&E ENGS 493 492 AND 491

C&E ENGS 492 AND 491

At CHAMA

ENGS 498 AND 493 RUN AS 2 EXTRAS CHAMA TO ALAMOSA
ENGS 492 AND 491 HELP EXTRA 498 EAST CHAMA TO
CUMBRES THEN RUN AS 2 EXTRAS CUMBRES TO CHAMA AND
MEET EXTRA 493 EAST AT LOBATO AFTER 2 EXTRAS 492 AND
491 WEST ARRIVE AT CHAMA ENGS 492 AND 491 RUN AS 1
EXTRA CHAMA TO LOBATO AND HELP EXTRA 493 EAST LO-
BATO TO CUMBRES

AFTER 3 EXTRAS 498 492 491 AND 493 492 AND 491 EAST AR-
RIVE AT CUMBRES ENGS 492 AND 491 RUN AS 2 EXTRAS
CUMBRES TO CHAMA

HWE Chief Dispatcher

Made COM Time 1:33 P.M. CORDOVA Opr.

Translation:

At 1:33 p.m., October 15, 1954, the dispatcher's office in Pueblo, Colorado, under the direction of Harold W. Eno, Chief Dispatcher, ordered two trains to run from Chama to Alamosa. Business was booming on the narrow gauge, and the pipe traffic, Gramps Oil business, and the annual fall "Stock Rush" was giving the narrow gauge all the car loadings it could handle. The order was copied by Chama agent Amos Cordova. (Amos now is Vice President of Marketing on the Durango & Silverton; he worked as the agent in Chama in the early days of his career.)

The road engines for the two trains will be 498 and 493. At this time there were two helper engines stationed in Chama, 492 and 491.

The first move is Extra 498 East leaving Chama with 492 and 491 helping. One helper on the point, the other ahead of the caboose. More than likely, this is a train of close to 35 cars. While 498, 492, and 491 are slowly pounding their way up Cumbres, 493 assembles a string of stock cars and a caboose and heads for Lobato to load livestock at the cattle pens.

When 498, 492, and 491 arrive at Cumbres, 498 will pick up other cars left at Cumbres by previous hill turns and head for Alamosa with about 70 cars. Engines 492 and 491 will turn at Cumbres and head back to Chama, leaving Cumbres about 5 minutes apart. They will meet 493 at Lobato. Undoubtedly, one will pick up 493's caboose and take it to Chama.

Upon arrival in Chama 492 and 491 will turn on the wye and pick up another cut of cars, perhaps twenty or so cars of stock loaded from the Chama stock pens, and head for Lobato to meet 493, which has now finished loading the dozen or so cars brought up there earlier. The trains will be combined with 493 as road engine, 492 and 491 as helpers, and will head for Cumbres.

Upon arrival at Cumbres, 493 will run to Alamosa and 492 and 491 will head back to Chama. Seeing as how all of this couldn't have started until after the orders were cut at 1:33 p.m., 491 and 492 couldn't have gotten back to Chama until at least 8:00 p.m. and 493's crew wouldn't have seen the lights of Alamosa until after midnight.

Simple wasn't it?

I hope all of you have had a joyful Holiday Season.

Earl is a consulting director of the Friends and Superintendent of Operations of the Cumbres & Toltec Scenic Railroad.

THE MODELER'S COLUMN

Ed "Boomer" Walton's column will resume in the next issue of the C&TS Dispatch, Spring 1996.



PRESERVATION PERSPECTIVE: NO. 2

by Keith E. Hayes — AIA

Can I Be on the National Register?

A plaque on the Chama depot states that the Cumbres & Toltec Scenic Railroad is listed on the National Register of Historic Places. What does this recognition mean? How does it effect the work of the Friends? Does this kind of recognition protect these sites from demolition or prevent modifications?

In 1966 the National Historic Preservation Act authorized the creation of the National Register of Historic Places, an official list of cultural resources in the United States. The National Register is administered by the National Park Service under the Secretary of the Interior. Nominations to the National Register are made by State Historic Preservation Officers (SHPO), and quite often Register properties are considered state and local landmarks as well. In preparing this article I was impressed by the scope of properties recognized by the National Register: from prehistoric archeological sites to sod homes to palatial mansions.

All these places on the National Register have some common traits, the Criteria for Evaluation:

- a. The site should be associated with events that have made significant contributions to the broad patterns of history; or
- b. The site should be associated with the lives of significant persons; or
- c. The site should embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess a high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. The site should yield, or be likely to yield, information important to prehistory or history.

And the site should be more than fifty years old. The Cumbres and Toltec Scenic Railroad easily satisfies items a, c, and d: it is representative of the patterns of westward expansion and settlement

and nineteenth century transportation and communications; period architecture and construction; and steam locomotive technology and wood car construction. I doubt if there is much of anything along the line that is less than fifty years old.

You probably agree that the Cumbres and Toltec is historic, but what of it. For starters, National Register status provides access to federal funding sources when they are available and is a credential for private funding too: National Register sites are the cream of the cream.

Many people believe that a nomination to the National Register will protect a property in perpetuity. You may be surprised to know that this is not so at all — the National Register is just a list, and a listing on the National Register does not interfere with a property owner's right to manipulate, change, or demolish the property (local ordinances may protect properties to varying degrees). However, when a property is listed on the National Register, it becomes important enough to warrant public attention before change or demolition can occur.

National Register listing also carries a cachet of authenticity. This is important in our age of mass production and computer-generated replicas. When you visit the Cumbres and Toltec, you are seeing and riding the real thing, cinders and all. To help preserve authenticity, the Friends use the Secretary of the Interior's Guidelines for Rehabilitating Historic Buildings. Within this document are recommendations for how to approach the gamut of problems the Friends encounters in each preservation/restoration/conservation project. Adherence to the guidelines provides quality assurance to preservation and funding agencies and helps maintain the authenticity of the railroad. The guidelines are available from the Friends and are mailed to those participating in the summer work sessions.

Please feel free to write me in care of the editor and share your thoughts on these issues.

Keith is a member of the Friends and a licensed architect practicing in Denver, Colorado.

BOARD HIGHLIGHTS

by Art Nichols

The annual meeting of the Board of Directors was held in Chama, New Mexico, on July 30, 1995. This report presents the major actions taken at the meeting.

Elections and Appointments

The following persons were elected as officers of the corporation for 1995-1996: Theresa Shaw, president; Ralph Flowers, vice president; James Herron, secretary; and Robin Kumler, treasurer. (Also elected were Howard Bunté, assistant secretary, and Roger Breeding, assistant treasurer.) Appointed consulting directors were Frank Burton, Earl Knoob, Leo Schmitz, and Joe Vigil.

William Lock was elected to the new honorary office of Chairman of the Board, which was created by a recent Bylaw amendment.

The executive committee consists of the four officers and Roger Briggs as Colorado representative and Steven Schroeder as New Mexico representative. As a result of another Bylaw amendment, Immediate Past President William Lock also serves on the committee.

President Theresa Shaw or her designee will be the representa-

tive to the Triad Committee (the triad consists of the C&TS Railroad Commission, Kyle Railways, Inc., and the Friends). Ralph Flowers was reappointed as primary delegate to commission meetings, and Wayne Freeark was appointed alternate.

Railway Post Office/First Day Event

Carmen Knoob reported that the special event sponsored by the Antonito Chamber of Commerce, the National Rocky Mountain Narrow Gauge Railroad Museum (a subcommittee of the Chama Chamber of Commerce), and the Friends had been "very successful; it had a very good product, yielding many orders for the first day of railroad operation envelopes."

Cumbres & Osier Section Houses

Commission Executive Director Leo Schmitz presented proposed changes to the Cumbres and Osier section houses. Parts of both structures could be converted into living quarters for rent. If the buildings were occupied, they would be safer than they are now

See Board Highlights, page 13

COMMISSION REPORT

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

AUGUST 31, 1995, ANTONITO, COLORADO. General Manager Joe Vigil reported that the number of passengers for the 1995 season is up 3 percent over the 1994 season through July, but business in August has been slower than in 1994. One report is that gambling in New Mexico is having a negative effect on tourism, and gambling may be a negative influence on the railroad. The Taos promotion program is slow and not doing as well as hoped.

The C&T's Railroad Commission considered a request to construct a road across the tracks at Cresco. The Colorado State Historic Preservation Officer does not object to the road, and the Colorado Attorney General's office says that the commission has the option of approving or disapproving the request.

If the commission approves the request, the attorney general strongly suggests that a contract be drawn up with provisions in it to protect the commission. The contract should include the following provisions: that the property owner pay all costs for the construction of the road, the track crossing, and the signage; that the owner provide a liability insurance policy and waiver of liability; and that the road be restricted to agricultural use only and not as a road into a subdivision. The commission approved the road request and directed the executive director to work with the attorney general's office in drafting a contract between the commission and the owner for this road, including the provisions suggested by the attorney general. Meanwhile, alternative sites for the road will be examined by the executive director, the general manager of the railroad, and railroad personnel.

The commission has negotiated with Cillessen Construction Company to construct the restroom building in Chama for \$160,000.

The draft of the Long-Term Preservation Policy was accepted and remanded to the Triad Committee for further study.

John Bush, Chief Mechanical Officer of the railroad, reported that rotary OY has been used in tough snow clearing service during the past five years and now is inoperable. He presented cost estimates of three options to return it to service. Option I would cost approximately \$20,000; Option II would cost between \$50,000 and \$65,000; and Option III would cost approximately \$200,000. John recommended that Option II be chosen.

The commission could afford to participate in Option I, but it would be difficult to afford up to one-half the cost of Option II. Lynn Cecil, president of Kyle Railways, stated that Kyle feels some responsibility because they were operating the rotary last spring when it broke and they could participate in up to one-half the cost of Option I. The commission agreed to participate for one-half the cost of Option I, with the possibility of some upgrade work on the rotary, which will be reviewed at the next meeting.

The commissioners approved a joint powers agreement between the New Mexico State Highway and Transportation Department and the C&T's Railroad Commission for an ISTEA (Intermodal Surface Transportation Efficiency Act) grant. The grant will provide \$140,000 and the commission and Colorado and New Mexico will provide \$46,000 for the phase I work on the Chama depot. In another matter concerning the depot, Marron and Associates, Inc., were awarded a contract for \$7,562.13 for the archaeological/environmental study of the Chama depot area, which is required as part of the ISTEA project.

Board Highlights

Continued from page 12

from vandalism. Leo stated that the commission wishes to apply for Colorado gaming funds to address the problems with the Cumbres section house roof. The proposed work would consist of repairing roof beam breaks, replacing incorrect wood beams, and reroofing with new shingles. By using a sandwich style of construction, with two 2- by 6-inch boards with a steel plate between them, the roof would be markedly stronger and more ice load-resistant. (During D&RGW days, the heat of the occupied building kept the ice off the roof during the winter.) The State Historic Preservation Officers have signed off and approved this style of rebuilding.

On the commission's behalf Leo asked the board for the Friend's support in 1996, through a labor contribution, in rebuilding the windows and doors of the Osier section and station houses and the section house roof at Cumbres. In the proposal for gaming funds, the Friends' labor contribution is considered 25 percent of the project's cost (for 1997 the commission will be seeking from the Friends an additional labor donation of 25 percent).

The board unanimously approved the plan presented by Leo contingent on the commission's receipt of gaming funds for the purchase of materials.

Publications

Since the beginning of the year, paper costs for the **C&T's Dispatch** have increased 33 percent. The board approved an increase in the publications committee budget to cover this increase and also ap-

proved an increase in the basic membership contribution because of this increase in the cost of production. Effective January 1, 1996, the minimum membership contribution within the U.S. will be \$25 and outside the country it will be \$35, an increase of \$5 in both categories. Announcement of these increases will be included in the new membership brochure and the membership renewal notices that will be sent out later this year.

Appointments of Committee Chairs

Car Restoration Facility: Bill Lock
Knotts Berry Farm: Warren Ringer, temporary liaison/acting chair
Library: Spencer Wilson
Long-Range Planning: Roger Breeding
Membership: Howard Bunté
Narrow Gauge Convention: Sam March
Organization: Terri Shaw
Projects: Roger Breeding
Publications: Art Nichols
Railfan: Bill Lock

Long-Range Planning

The board devoted much of its time to discussions of the proposed car restoration facility, options for further restoration of the Cumbres snowshed, and reorganization of the volunteer work sessions. There will be further discussions of these issues at the board's November meeting.

LETTERS

Send your letters to the editor at 1307 45th Street, Los Alamos, NM 87544; e-mail: asn1307@aol.com

Proud to be a Member

I am impressed by your ballots, statements by director candidates, and by the generally high level of operation of your organization. We are fortunate to have such qualified enthusiasts. I am proud to be a member of the Friends.

Russell Cowles
Minneapolis, MN

Dear Friends

I am so moved by the articles and reports in the *C&TS Dispatch* that I want to say hello and congratulate all of you. In reading every word of the issues we have received here in Malaysia (I read every word of everything we receive from the U.S. because it brings you closer to us), I have found so many accomplishments. Having served on the Board of Directors and been a part of the planning and, in some cases, the achievement of goals and dreams, I can see that the members and the board are doing an outstanding job. Thank you.

The volunteer work sessions are over for 1995, and the 1996 planning has already started. Members, support the board now while your memories and feelings of accomplishment are fresh in your minds. Efficiently wrapping up the details from the volunteer sessions enables the board to do a better job for next year. By the way, does anyone have any extra photos from the sessions? I would love to see them and promise

to return them. I am especially interested in the completion of activities at Sublette, having been a member of the "Sublette Heights" community in the past few years. Oh, you have no idea how much Carl and I miss being with you at that beautiful place.

Tina Tebbens
8D-1-6 Prima Damansara
Jalan Chempenai, Bukit Damansara
50490 Kuala Lumpur, Malaysia

Vandals Derail & Friends Rerail

Not all of the accomplishments of 1995's summer volunteer program were in the work plan, and one crew of Friends proved versatile enough to double as gandy dancers.

On the morning of July 31, the session "B" volunteers atop Cumbres Pass were hard at restoration work on the car inspector's house when a cry went up: "Train derailed on the wye!" In fact, a C&TS speeder had hit the cinders at north switch, just outside the snowshed. Vandals apparently drove a spike over the railhead.

Kyle Railways backhoe happened to be on the pass, helping volunteers to backfill around the newly installed foundation of the car inspector's house; its efforts to lift the speeder onto the rails, however, were in vain.

Cumbres site leader Bob Ground offered the muscle of his crew to the frustrated driver of the speeder, who eagerly accepted the offer. Virtually every member of the volunteer group joined in this effort and made

short work of the rerailing.

Within a few minutes the Cumbres crew were back at work on the house, except Kip Merker, who tarried long enough to tell the speeder's driver, "shucks, you don't need a backhoe — you need a Friend!" (The Cumbres crew, session "B" were Bob Ground, Noreen Breeding, Roger Breeding, Carol Anne Freeman, Kip Merker, Tim Mower, Tim Olson, Jim Paules, Bill Stone, and Nick Wilson.)

Brian Svikhart
Cumbres, Session "B" chronicler
Arlington, VA

More about the Tunnel

In respect to the small tunnel Friend George Swain wrote about in the July 1994 issue, I should like to retract my comments published in the November 1994 issue.

I inspected Mr. Swain's tunnel this September and he is right, it is a prospect hole. The geology at Hamilton's Point is a massive sandstone overlain by breccia. Mudstone with fossil leaves and twigs is also present as a sill in the sandstone. The tunnel is driven on a nearly vertical fault in the sandstone. This fault is shown clearly at the upper left of the photo on page 10 of the July 1994 issue. Along this fault can be found minor traces of chalcocite and bornite on the sandstone, secondary replacement minerals probably brought in by surface waters trans-

See Letters, page 15



July 31, 1995, 10:30 a.m. Speeder in the cinders on Cumbres Pass.
Photos by Brian Svikhart.



Friends volunteers from left: Nick Wilson, Toby Gomez (Kyle Rys backhoe operator), Tim Olson, Roger Breeding, Bob Ground, Tim Mower, and Kip Merker.

Freight Train to Toltec



The Friends special train with engine 463 crossing Cascade Trestle, July 29, 1995. Photos by Tom Cardin.



The special train approaching the photo line at Big Horn.



On the siding as the westbound from Antonito passes on the main.



The photo line at the highway crossing below Cumbres.

Letters

Continued from page 14

porting minerals from the breccia down through the fault crack in the sandstone. Chalcocite is copper sulfide Cu_2S and bornite is copper iron sulfide, Cu_5FeS_4 . The chalcocite will be found as a black to brown stain on the buff sandstone near the fault, and with a hand lens one can see on some samples the bornite as very tiny, shiny, purplish pimples on the chalcocite. You will have to look carefully; there isn't much of it.

The prospectors evidently followed the fault into the sandstone hoping to encounter a commercial mass of these ores. The cross tunnel at the back was likely an attempt to see if any parallel mineral-bearing fissures existed. Regrettably, what mineral is pre-

sent is in such trace quantities as would be valueless. Of course, if someone with money to gamble wanted to tunnel back further, following the fault, they might find a commercial deposit. But they also might not. One would want to look for other evidences of mineralization in the overlying breccia before risking time and money. I found none.

I would not want to see the tunnel sealed. Why not let the enthusiastic hike into it with their geologist's hammers and knock out samples of the copper stains for paperweights as I have done. The rock is solid enough and the geology interesting. The roof of the tunnel, clearly seen in Mr. Swain's photograph, shows the nodules and crust of calcareous material formed as the water from above transports soluble carbonates down through the permeable sandstone to deposit them by evaporation on the

tunnel roof. In some tens of thousands of years, they will close the tunnel naturally. Meanwhile, unless an owner comes forward, let's call it, for Friends' purposes, "Swain's Mine." A sign and a claim stake could be a point of interest for folks riding the train.

I hope this sets the record straight and other Friends will hike in and examine this most interesting locality. Perhaps stock certificates in "Swain's Mine" could be sold by the Friends to raise money for worthy projects. This would be perfectly legal as the claim could be restaked and recorded by Mr. Swain or the Friends.

*Bill Laux
Fauquier, British Columbia
Canada*

1996 SCHEDULE OF EVENTS

May 25, Saturday
Opening Day

June 29, Saturday
Eighth Annual Moonlight Train

July 17, Wednesday – July 19, Friday
Volunteer Work Session "A"

July 22, Monday – July 25, Thursday
Volunteer Work Session "B"

July 29, Monday – July 31, Wednesday
Volunteer Work Session "C"

October 13, Sunday
Planned Closing Day



Engines 488 and 489 outside the Chama engine house and ready for service on the morning of September 19, 1994. Photo by George Swain.



**Friends of the Cumbres & Toltec
Scenic Railroad, Inc.**
5732 Osuna Road NE
Albuquerque, New Mexico 87109

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