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WINTER SHOP WORK 2004 - 2005

by Mark V. Yates Photographs by Tom Cardin

Last winter, locomotives 484 and 487 were upgraded to comply with the revised 49 CFR Part 230, making them the first two locomotives to be totally compliant since implementation of the changes in 2000. They are now under the 1472 Service Days with periodic inspections. In the upgrading process, the locomotives surpassed the standards set by Part 230 by putting them back to the Baldwin and D&RGW drawing specifications as much as possible. During the 2004 season, both locomotives ran admirably, and the engineers and firemen seemed pleased with how they operated. Together, they accumulated 11,653 miles (484-6,042 miles and

487—5,611 miles) with 29,657 passengers in tow during the season and 362 passengers riding the two holiday trains on December 4.

This winter 484 will receive routine maintenance, 487 will receive routine maintenance and completion of the spring rigging, 488 will be completed, and work on 489 will begin. The Antonito shop crew is concentrating their efforts on passenger car repairs.

484

In upgrading 484 to be compliant with 49 CFR Part 230 last winter, the running gear, valve gear, spring



Locomotive 487 at rest in Chama engine house after the 2004 season.

rigging, and tender were thoroughly inspected and repaired in addition to the boiler work. This was the most thorough repair of a locomotive since the 463 in 1993-4. The work performed on 484 would equate to a Class 3 Repair in the old parlance (see Tidbit of Railroad Terminology below). Few repairs will be made this winter other than general inspections and maintenance. It is wintering in Antonito.

487

487's running gear was repaired prior to the 2003 operating season. During the 2003 season it racked up 5,627 miles. Added to this year's mileage of 5.611 miles, a total of 11.238 miles have been accumulated since the running gear was rebuilt. Back when five locomotives were operating, a locomotive averaged about 4,700 miles a year. Toward the end of this past season the rod banging on 487 became very noticeable and it was obvious that new rod bushings were needed. Rod bushings on the C&TS typically can make three seasons under normal usage when there are at least five locomotives in the operating pool, but due to its operating alone for one season this wear was increased. The rods are presently off the locomotive and new bushings are being made.

See Shop Work, page 4 -



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

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

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



PRESIDENT'S COLUMN



South by Southwest

As we start 2005, I find myself plotting a new course from my hometown of Green Bay to that of the Land of Enchantment, south by southwest. It seems somewhat ironic that past President Brian Shoup and I both hail from Wisconsin, home of the Packers, Badgers, cheese, and cold winters!

During our 1,500-mile, two-day journey to Albuquerque, my wife, Judy, and I witnessed some splendid scenery as we crossed through eight states of America's Heartland. While driving, I had ample opportunity to think about the future and what lies ahead for this organization we call the Friends of the Cumbres & Toltec Scenic Railroad.

To start, I would be remiss if I didn't tell everyone what an honor it is to have this opportunity. The membership of this organization has a deep love for the Cumbres & Toltec, a magnificent cause, and a national treasure! In my short time at the helm, I can truly appreciate that this railroad has no equal. It is living history in what has become a society that is ever changing and rapidly paced. For your efforts, both past and present, you are to be congratulated and commended.

As Brian alluded to in his final column, the Cumbres & Toltec does indeed move at its own pace. To some this fact may indeed strain one's patience. As I look at things, these are the cards we have been dealt. Railroads historically have always moved at their own pace, so the Cumbres & Toltec is just behaving like many of its kindred in the industry. Having years of experience in the actual operations of short line railroads and the historic preservation community, none of this is daunting to me. It comes with the territory and is a welcome challenge.

Development of this nation's railroads during the 1800s was no small feat. There were struggles and fear of the

unknown. But through it all, the movement persevered and today the United States has the greatest rail system in the world. Likewise, through thick and thin, the Denver & Rio Grande Western withstood constant peaks and valleys in business during its 90 years on the property. In the 35 years since its inception, the Cumbres & Toltec has survived a multitude of natural and man-made challenges. As it has always been said, railroading is not for the faint of heart.

As we begin 2005 and I continue to settle into my new position with the Friends, it is clear that we have some exciting times ahead. The operation of the C&TS has stabilized, having overcome some gut wrenching obstacles the past few years. With some luck and hard work, the RGRPC should have locomotive 489 completed by this fall, which gives the railroad four operating locomotives. This is quite an accomplishment given where the railroad was just two years ago.

With that said, there is a great deal of work ahead for everyone, the Commission, the RGRPC and yes the Friends. Given the relationship between all three parties, we must continue to work together for the betterment of the Cumbres & Toltec. I pledge my commitment to solidify these relationships and to be responsive to you, our membership.

Personally, I see the Friends ascending in the next few years to that next level in the historic railroad preservation community. As the true museum arm of the Cumbres & Toltec Scenic Railroad, we have the opportunity to expand our role as caretakers of the historic fleet and interpretation thereof. I do realize that some will welcome this challenge while others might feel somewhat threatened. As the Friends continue to mature as an organization, I know one thing will remain constant, and that is the passion you all have for the cause.

Whether it is brushing vegetation, scraping boxcars, being a docent, or preparing food in the kitchen car, everyone has a role to play so as an organization, we may attain our goals. Along the way, we still want to have fun and experience the camaraderie that makes the Friends such a unique organization. It will be my responsibility to get us to the next level but simultaneously preserve the grassroots nature of our organization.

So as we move forward, let us maintain that passion and volunteerism towards our mission. Let us all work smart and with focus towards a common goal. As we all advance in the realm of time, always remember the difference this organization has made in the preservation of the Cumbres & Toltec. In the weeks and months ahead, I look forward to meeting more Friends members. I am eager to work with our membership and listen to observations you all have. Thank you again for all your support and dedication.

—Tim Tennant

John Blake

Long-time Friends member John Blake passed away on December 13, 2004, in Omaha, Nebraska, at the age of 66 after a nine-month battle with lung cancer. John had been a member of the Friends for ten years, and had volunteered regularly for the summer work sessions. He served as car painting team leader and as a member of the tool car team. A memorial fund has been established in John's name. Memorial funds will be put toward completion of work on locomotive 488, John's favorite, with any remaining funds to be used for locomotive 489. John's daughter Kristi Farrington has indicated that the family is planning to visit during work session E between August 1 and 5 to spread John's ashes on Cumbres Pass from the cab of 488. Our condolences go out to John's family, as he'll be greatly missed.

Contributions to the John Blake Memorial Fund may be sent to The Friends of the Cumbres & Toltec Scenic Railroad, 6005 Osuna Rd. NE, Albuquerque, NM 87109.

Vera Alcon

Word was received on February 22, 2005, that Vera Alcon, long-time Chama resident, has died. As Dan Ranger, former general manager of the C&TS, has said, "She was an 'institution' in Chama. She went back to the forties with the old Kelly's beanery, which all the D&RGW guys went to. In time she set up her own place on the west side of Route 17, and near the end of the 1980s she built the new restaurant on the east side of Route 17." Bill Lock, founder of the Friends, has said that "she was definitely a 'Friend.' From the earliest days of our volunteer work sessions, our members have enjoyed the hospitality that Vera showed to us while we were visiting in Chama. After Vera opened her new restaurant building, on many occasions our board of directors has been privileged to use the meeting room of Vera's restaurant, where she graciously provided drinks and snack foods for us. Many times after the board meetings she also served the directors their meals so that they could continue their discussions. She will certainly be greatly missed by all of us in many ways."

Shop Work (continued from page 1)

The spring rigging was mostly completed in 2003 with the exception of the engine and trailing trucks. These will be completed this winter. The engine truck will receive a new radius bar. The pedestals have been machined true and new liners have been fabricated. Proper diameter 28-in. wheels will be applied to the axle to replace the 26-in. wheels. The trailing truck will also get proper diameter 30-in. wheels and the spring rigging will be gone through.

488

Work continues on 488. There were a couple of setbacks during the summer and then again in the fall. The first was that rather than replacing portions of the side sheets and door sheet due to radial cracking from the staybolt holes, the holes were prepared by beveling and then the holes welded flush. A new hole was drilled and tapped and a new staybolt installed. When the work was completed and hydrostatically tested, there were numerous leaks. The areas were cut out and it was discovered that the beveling process did not always include the entire radial crack, which cracked again from either installing the staybolt or the hydrostatic test. The second setback occurred during the shop's hydrostatic testing in the fall when the fittings on the steam dome cap for the safety valves were found to be leaking. Upon inspection, porosity was found in the material where threads had been machined. Replacement material was sent from the supplier. Due to the holidays and winter storms, this did not arrive until mid January. New parts were manufactured and installed and a successful shop hydrostatic test was completed.

The Federal Railroad Administration (FRA) was notified and an official hydrostatic test and steam up are scheduled for February 8 and 9, respectively (see Federal Inspection Follow-Up below). Following a successful federal inspection, the locomotive will be completely reassembled and readied for opening day, May 28, 2005.

488 last saw service in October 1997; it will be good to have it back in the stable of operable locomotives. It will be the third locomotive under the 1472 service days. I am sure the engineers and firemen are curious as to how it will act. It used to be a coal eater, gaining the nickname Lucifer. It is



Locomotive 488 inside the Chama engine house ready for inspection by the Federal Railroad Administration.

hoped that the repairs will have made it more conservative on fuel.

489

In 2003, the 489 was stripped down to the boiler shell in anticipation of the approval of another Economic Development Administration (EDA) grant. This has not transpired. The C&TS Railroad Commission has requested funds from both states, and legislative action is pending. In January 2005, the Friends' board of directors generously approved the use of \$70,000 from the Another Century of Narrow Gauge Steam fund to purchase materials for 489 which have a long lead time. Some of these materials will include grates, pressure vessel quality steel, superheater return bends, superheater unit tubing, other castings, etc.

The 489 has been moved into the west bay of the old roundhouse to complete the interior blasting of the boiler and the water space around the firebox. Obvious staybolts to be replaced and portions of the side sheets and the door sheet of the firebox are being cut out to assist in access for a thorough job blasting and in anticipation of needed repairs. The exterior of the boiler is also being prepared for ultrasonic testing by grinding several small circular areas within each one-foot square grid.

Passenger Cars

It may be one of the coldest places on earth, but the crew is not hibernating in Antonito. They are busy repairing passenger cars. Much of the work is centered on the trucks and wheels. Wheel sets with cast iron wheels are being replaced with multi-use cast steel wheels. Cast steel wheels that are at or near the condemning limit are having the profile renewed. A lot of time is being spent on the trucks and brake rigging of the cars as they come into the shop. There is also interior work happening in applying fresh coats of varnish to the woodwork, replacing worn flooring, reupholstering seats, replacing broken doorknobs and windows, etc.

Both shops are staying busy preparing for the upcoming season. Although much of the work cannot be seen on either the locomotives or the passenger cars, it does make a difference on operations. I am sure those who come here for the Friends' work sessions understand this. We are striving to make the operation as safe and trouble free as possible for both our passengers and employees.

TIDBIT OF RAILROAD TERMINOLOGY

In the old days, locomotive repairs were classed into five categories. When one employee was talking with another about how a locomotive needed Class 1 repairs, the other had a general idea about what was needed and involved. This has since fallen into disuse along with the steam locomotive. Below is a description of these classes of repairs adopted June 1, 1918 "by all carriers for reporting repairs to locomotives made at their various shops and roundhouses" as outlined by the United States Railroad Administration (USRA).

Standard Classification of Repairs to Locomotives and Tenders

Class 1

New boiler or new back end. Flues new or reset. Tires turned, or new. General repairs to machinery and tender.

Class 2

New firebox, or one or more shell courses, or roof sheet. Flues new or reset. Tires turned, or new. General repairs to machinery and tender.



New trucks going under 488's tender.

Class 3

- Flues all new or reset (superheater flues may be excepted).
- Necessary repairs to firebox and boiler.
- Tires turned, or new.
- General repairs to machinery and tender.

Class 4

- Flues part or full set. Light repairs to boiler or firebox.
- Tires turned, or new.
- Necessary repairs to machinery and tender.

Class 5

- Tires turned, or new. Necessary repairs to boiler, machinery, and tender, including one or more pairs of driving-wheel bearings refitted.
- General repairs to machinery will include driving wheels removed, tires turned or changed, journals turned, if necessary, and all driving boxes and rods overhauled for a full term of service. Running repairs unclassified.

Suffix A to any class of repairs will indicate that the repairs are required on account of accident.

Suffix B will show the initial application of stoker.

Suffix C will indicate the initial application of super heater.

Suffix D will indicate the initial application of outside-valve gear.

Suffix E will indicate locomotive was converted from compound to simple, or from one type to another.

Mallet locomotives will be indicated by a star following classification.

Locomotives receiving class 1, 2, or 3 repairs must be put in condition to perform a full term of service in the district and class of service in which they are to be used.

Locomotives receiving class 4 repairs must be put in condition to perform not less than one-half term of service

Friends Grant Writing Group Created

Under the auspices of the Development Committee, the Friends has formed a grant writing group (GWG). During the summer of 2004, this group of members got together during the work sessions to address the Friends desire to seek funding from a variety of sources. Coming together were: Caroline Tower with a background in nonprofit foundation grant writing; Linda Smith with experience in corporate fund raising and government grants; Sandra Engs and Nancy Gordon offering to assist with foundation research; Terri Shaw to provide background for Friends previous grant requests; and Nan Clark as facilitator.

Caroline and Linda each provided the group with enough basic information to start the process. Working from home, various foundations were researched for their potential for funding a variety of Friends projects and interpretive activities. The projects committee deemed it appropriate to appoint a liaison, with Ed Lowrance joining the group in October. Additionally, Cal Smith, who routinely volunteers in Antonito during work sessions, became a member during that month. It should be noted that for the last two years Cal has successfully written grants funded by the Amherst Railway Society.

During the week of January 10, 2005, Linda, Caroline, Ed, and Nan met in Albuquerque to create a template for future grants. The group was especially interested in working with new Friends President, Tim Tennant, whose background includes corporate, non-profit, and government grant writing and fundraising. In so doing, the GWG completed their first application to a private foundation in the amount of \$22,843 to fund the completion of the first phase of the Antonito CRF. The outcome of the request should be known by late April. In addition to this, Linda Smith was working on completing the Friends joint application with the C&TS Railroad Commission to the National Park Service. The grant application, funded as "Save America's Treasures," was written for \$1 million for preservation of the rail corridor and requested funds for track work to restore the C&TS ride time to its historic duration. The outcome of this proposal will not be known until late this year. It is of note that also present in Albuquerque were Linda's husband, Ted, and Nan's husband, Les, both of whom assisted in the Friends office.

While in the area, the GWG had the opportunity to meet with top New Mexico Historic Preservation Officer (SHPO) Katherine Slick and New Mexico SHPO grant writer and Friends member, Ken Earle. This meeting was made possible and arranged by Friends member Dick Cowles. President Tennant, the GWG, and Dick all felt the meeting was extremely important and productive. Throughout 2005, the group will continue working on a variety of other grants to fund preservation, restoration, interpretive, and capital projects for the Friends.

-Nan Clark

Friends to Grant \$70,000 to Commission for Locomotive 489 Repairs

The Friends is pleased to announce a grant to the C&TS Railroad Commission of \$70,000 toward repairs of locomotive 489. This funding will be used for ordering long lead-time parts for the project. This gift will be dispersed from the Another Century of Narrow Gauge Steam fund. RGRPC management is estimating that the 489 could be up and operational by the end of September.

Candelaria Fund Gift for Planning of Museum/Interpretive Center

The Candelaria Fund of San Francisco has awarded the Friends a grant in the amount of \$15,000 to be used toward the study and planning of a potential Museum/Interpretive Center for Chama. We are appreciative of The Candelaria Fund's generosity in helping to fund this initiative and thank Friends members Richard and Caroline Tower for their assistance in making this gift a reality.

A task force has been assembled to undertake the study of constructing a facility in Chama for the purpose of enhancing the Friends interpretive and preservation efforts. The reason for the attention to this project at this time coincides with a window of funding opportunity that exists through the New Mexico Department of Transportation. The Statewide Transportation Improvement Program (STIP) provides funding through the federal government's Transportation Equity Act for the 21st Century (TEA-21). This program provides a 75% federal funding mechanism requiring a 25% match from local sources. In the case of this project, the 25% match would ultimately come from the Friends. As the task force advances with this study, we will provide the membership with updates as to the project's progress.



Rick Rivas smoothing holes in 488's flue sheet prior to installing flues.

in the district and class of service in which they are to be used.

Locomotives receiving class 5 repairs must be put in condition to perform not less than one-fourth term of service in the district and class of service in which they are to be used.

The preceding was taken from *American Machinists' Handbook and Dictionary of Shop Terms, 8th Edition* by Fred H. Colvin and Frank A. Stanley (New York: McGraw-Hill Book Company, Inc.), 1945.

This author is unsure what time period is intended by "term of service." This could mean the normal flue time on a locomotive which under the previous Part 230 was 48 months of service, not to exceed 60 calendar months. The "class of service" would be passenger, freight or switching.

FEDERAL INSPECTION FOLLOW-UP

On February 8, a Federal Railroad Administration Inspector and Starfire Engineering witnessed the hydrostatic test of

Tommy Garcia (l), Steve Montano, and Rick Rivas bring drivers into the frame of 488. locomotive 488. Following the test, the water was drained, and the washout plugs and the steam dome cover were removed for an internal inspection per 49 CFR §240.36 by the FRA inspector. One radial staybolt was found broken. This was replaced; the washout plugs and steam dome cover were replaced and the boiler refilled with water for the steam test the next day.

On February 9, both the FRA inspector and Starfire Engineering were present for the test firing of 488 per 49 CFR §240.37. No exception was taken to the steam test.

Aside from a few minor leaks and a problem with one of the safety valves, both the hydrostatic and steam tests were successful. Both the FRA inspector and Starfire Engineering were impressed with the work performed by the C&TS shop crews on the engine and tender. The FRA inspector was particular impressed with the work done on the spring rigging, commenting several times how level it is. He also made several complimentary comments on the welding to the firebox and the rear flue sheet and on the tightness of the boiler in general.

While proposed completion dates came and went, the 488 has now passed FRA muster and following its reassembly will return to service for the 2005 season. Congratulations to all the C&TS shop employees on a job well done and to those who made this possible by obtaining and administering the necessary funding.

— Mark V. Yates is Chief Dispatcher of the C&TS. Kim Smith, C&TS General Manager, contributed to this report.



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FRIENDS PUBLISH CUMBRES PASS WALKING TOUR BROCHURE

by Terri Shaw

On an overcast August morning in 2002, I walked around Cumbres Pass with two members of my exhibit planning team. We spent hours looking at every place where we thought there had been activity or a structure. We examined photos and maps. We looked for the old roads. We found evidence of the station in a place where no one thought it had been. We stood at collapsed buildings and reconstructed them in our imagination. The more we learned, the more excited we became about encouraging visitors to walk around and see all that Cumbres Pass once had been.

Cumbres Pass is a special place to many of the members I have talked to. I first got to know it as a chronicler of the snowshed reconstruction project. We would break for lunch in time to watch the train round Windy Point and pull up to the water standpipe. Train chasers are there most every day to watch that same sight. And volunteers who worked during many seasons on projects at the car inspector's house and section house would recount how people driving by would stop to find out what the buildings were. This was clearly a site that needed a guide for visitors.

In 1998 I met with the first group of volunteers for the "exhibit planning and design" project at summer work sessions. A walking tour brochure for Cumbres Pass was one of the ideas we wanted to pursue. But first we spent several years revising and expanding the walking tour brochure for the Chama and Antonito yards. When it was published [see article in Winter 2000 of the Dispatch] Cumbres was next.

In August 2001 I asked Frank Martindell and Dick Ross to look at the site, gather information about where the structures were or had been, and form some ideas about what to include in a brochure. By the 2002 session they had obtained historic maps and photos and were ready to take me on that tour I describe above.

Also in 2002 a seven-year project to repair the Cumbres section house roof and renovate the interior was drawing to a close. Interested volunteers had prompted a reevaluation of how the building would be used when it was ready for occupation. The Friends' board adopted the recommendation of a task force that the section house be used as an interpretive center. The brochure would be the first step in a larger interpretive plan for the site.

In August 2003 Andy Ross, Dick's son, joined our planning group. We walked the site with a map that combined information from all the maps we had found and made notes about every location that might be included in the brochure. Back in Chama, around the conference table in RGRPC's office, we discussed a numbering scheme, revised the text that Frank had drafted earlier in the year, wrote an introduction, looked for photos we could use on the cover, and experimented with a layout. Now we felt sure it could be ready for the 2004 season.

We were including in the brochure four structures that had been removed by the D&RGW – the station, the covered turntable, the water tank, and the bunkhouse. Using the clues on the ground, historic photos, and a surveying pole, Dick and Andy located the center points of the covered turntable and water tank, and the southwest corner of the station.

Now that we had found them, the question was how to mark them for visitors to find. All of us wanted to avoid putting numbered markers next to each of the features so that the site could look more natural and not like an exhibit. The brochure would guide visitors to the features with a map and drawings of each feature. The markers would suggest a feature of the structure without completely recreating it (there are no plans to rebuild any of these structures), such as a circle on the ground where the turntable had been.

That same week I also talked to volunteers Dave Ferro and Laura Kammerer, architects with training and experience in archaeological investigation. I asked them about examining these four sites for evidence of the structures that had been there before any markers were erected. They endorsed this idea and Laura agreed to lead a two-week "dig" at Cumbres in 2004.

That summer our planning group devoted part of our week to discussing how to use the section house as an interpretive center. We agreed that two broad themes of Cumbres's story were gravity and weather. We brainstormed many ideas, and then selected fifteen exhibits and activities that would develop these themes.

Back in California, I enlisted my friend Clint Wade, a graphic designer, to lay out our brochure. It would follow the same style as the Chama/Antonito Yard walking tour brochure – drawings as well as descriptions of each numbered feature of the map. Over several months, Frank did the drawings, the team researched information we still weren't sure of to fill out the text, I wrote text revisions, and worked with Clint to set the look of the map, drawings, text, and cover art.

It was printed in June 2004 and the whole team got to "see it in action" at Cumbres in August. While we were at Cumbres for parts of two days to participate in the archaeological digs, we were delighted to see visitors walking around Cumbres with brochure in hand. We also revisited and revised our ideas about markers for the station, turntable, water tank, and bunkhouse. The markers are on our work list for 2005, and Laura will be back, this time as leader of the team that will install the markers.

As a thank you for your support of the Friends, the brochure was included with all 2005 membership renewal letters. We've heard from some of you with new information and appreciate having it. We hope you enjoyed learning more about Cumbres Pass.

Many thanks to Frank, Dick, Andy, and Clint for the hours they volunteered to this project and to Laura and Dave for their professional support.

- Terri Shaw is a former president of the Friends.



1. Section House. It was built in 1882 and resembles section houses throughout the D&RGW system...



2. Site of Bunk House. Built in 1882...this structure provided quarters for track and road crew members.



3. Wooden Trestle. This trestle was built to enable the railroad to cross a ravine and proceed around Windy Point...



13A. Covered Turntable...was a gallowstype turntable, measuring 50 feet in diameter and was used to turn locomotives.



CUMBRES PASS, COLORADO.

The Cumbres & Toltec Scenic Railroad (C&TSR) ... was once part of the Denver & Rio Grande Western Railway... In the spring of 1880, crews started laying track west out of Antonito, Colorado. In mid-December they reached the highest point on the line... After the railroad was built, the pass came to be known as Cumbres ("crests" or "summits" in Spanish).

Cumbres can come alive again when you stop to wonder, "What are those buildings?" and rediscover their history and significance.

This brochure is your guide.



5. Site of Wooden Water Tank. This tank was like others that can be seen along the line... Watering facilities had to be located every 7-10 miles...



10. Site of Store and Post Office. This was the location of a gas station, general store, and post office during the 1930s...



WELCO

ROAL

15. Site of Cumbres Station. The station was built in 1882 and removed in 1954...The station agent's office was on the ground floor and his family lived in the other rooms. They lived here year round.

UNCOVERING CUMBRES

by Deborah Williams Photographs by archaeological survey team

The Friends broke new ground during the 2004 work sessions E and F, as team leader Laura Kammerer led an archaeological investigation at Cumbres in search of buildings that crumbled and disappeared long ago. Before arriving at the site, Laura studied old photos, maps, and articles concerning the history of Cumbres. Terri Shaw and her team contributed information also, and a list was made of significant vanished structures. The goal was to find their exact locations.

Members of the session E team were Karen Garnier, Rae Haynes, Curtis Hixon, Alan Paulsen, and George Swain. Scott Hardy and Charles W. "Chuck" Smith worked with Laura in session F.

The team used measurements from fixed landmarks, such as the section house, and began their search with threefoot long, 1/4-inch-diameter steel probes. These are somewhat like the poles rescue teams use to probe the snow for trapped skiers, but they were largely ineffective at Cumbres due to the layers of coal and cinders beneath the surface. Digging narrow trenches was much harder work, but turned out to be the best way to uncover remnants of the buildings.

The area once hummed with activity and noisy workers, but the ruins recounted their tales silently in 2004. The



Session E team working behind the car inspector's house to locate remains of outbuildings. Here a domestic snowshed linked a well house, coal storage area, outhouse, and animal pens.



Team leader Laura Kammerer documenting evidence of coal bunker foundation members at the south end of the new snowshed. Flanking the snowshed, two such structures were constructed in 1916 on the site of the former covered turntable.

foundation of the braced timber structure told the location of the turntable it once covered, and a piece of cast iron found at the car inspector's house spoke of an old hand pump. Brick piers and wood sills were discovered at the station site. Portions of sills and foundation timbers were found at the site of the new snowshed and its associated coal bunkers.

Behind the car inspector's house, remains were found of wood flooring, wall siding, and posts. The foundation of the bunkhouse was well preserved, and the team located the southern end of the new snowshed and the site of the covered turntable.

Laura and her teams made certain every find was photographed, sketched, measured, and mapped to enrich the interpretation of the site for future visitors. David Ferro is working on detailed plans of each of the uncovered structures, and the appropriate forms and digital photos are being prepared for submission to the Colorado State Historic Preservation Office, the New Mexico State Historic Preservation Office, as well as to the Friends.

Finally, to protect the discoveries from further damage, the team backfilled the trenches they'd dug, and the remnants of Cumbres disappeared like ghosts.

— Member Deborah Williams is also known as Cinder Bear, the railroad mascot.

Another Century of Narrow Gauge Steam Annual Report, February 18, 2005

Summary

We are pleased to report that 2004 was another good year for the Another Century of Narrow Gauge Steam (ACNGS) fund. The fund continues to provide a stable source of long-term funding for the Friends, and is the primary source of private support for the capital and special project needs relating to the historic preservation mission of the Friends of the Cumbres & Toltec Scenic Railroad.

Since its inception in 2002, aggregate pledges and gifts of approximately \$630,000 have been made to the fund. Actual contributions since 2002 total \$477,000, including \$93,000 in 2004. Major fund investments over the past year include \$125,000 (\$60,000 in 2003 and \$65,000 in 2004) paid to the Commission as the Friends' matching portion of the EDA locomotive grant and \$60,000 disbursed for the Friends' new railcar restoration facility in Antonito. The ACNGS fund currently has, net of commitments, approximately \$95,000 of cash available for use.

EDA Locomotive Grant

Last fall the US Economic Development Administration (EDA) made the final payment on its current series of grants to support the railroad's steam locomotive re-building program. The \$400,000 payment (which had no separate Friends matching requirement) in October 2004 brings the total EDA investment in the restoration of locomotives 484, 487, and 488 to \$1,400,000. These grants were made possible, in part, by the efforts of the Friends as a co-applicant with the Commission on the grant request, and the Friends 10% matching requirement on the grant, \$125,000, was only possible by virtue of the funds available through the ACNGS fund. The Commission, with funds made available by the States of New Mexico and Colorado, also provided matching funds in excess of \$125,000 toward the grant. Without the EDA grant and the matching funds provided by the Friends and Commission, it is unlikely that any of the locomotives would be operational today. If you have contributed one dollar to the ACNGS fund, you have made a direct contribution to keeping the C&TS railroad operating.

Antonito Car Repair Facility

The second major initiative supported by the ACNGS fund in 2004 was the Friends new railcar restoration facility (CRF) in Antonito. The 4,300 square foot steel building, erected last fall on Friends property just east of the Antonito yard, is a two-stall car shop with capacity for up to four 30-foot freight cars. The Friends board approved the facility last summer, after plans from prior years had been delayed. Long-time Friends supporter and Antonito site volunteer Malcolm Mackey provided encouragement, support, and seed funding for the facility and the ACNGS fund provided \$60,000 for completion of phase one.

Additional work on the CRF, such as a concrete floor, track, and electrical service, is planned this year as funds become available. Grant applications have been made to cover the projected costs, but it is possible that the ACNGS fund will contribute additional amounts to finish the facility.

Other Fund Activity

The ACNGS is primarily funded by members of the Friends. Out of approximately 700 contributors since inception, about 650 are Friends members. As you know, 10% of all fund contributions are allocated to the Friends permanent/endowment fund. The permanent fund now totals approximately \$51,000, including the \$47,500 added to it from ACNGS contributions. The Friends strategic plan targets the growth of the permanent fund to the \$250,000 range over the next five to six years.

Administrative expenses of the fund continue to run below the 5% authorized by the board. Through December 31, 2004, the administrative expenses paid from the ACNGS fund since inception total \$10,900, or 2.2% of the total fund contributions.

Other than cash, the only asset held by the fund is a \$20,000 promissory note from the Rio Grande Railway Preservation Corporation (RGRPC). This note evidences a loan made by the fund to RGRPC in 2003. The note

bears interest at 6.5%, which is paid monthly. The principal amount due is scheduled for repayment in monthly installments in 2006.

Future Fund Uses and Needs

As you know, last year the Friends and the RGRPC agreed that RGRPC would no longer be a controlled affiliate of the Friends. While you may not notice any difference in the operation or management of either entity, what this means for the Friends is that the ACNGS funds will no longer normally be used to provide capital directly to the RGRPC. When ACNGS funds are used to support the railroad, they will be provided to the Commission for its use and direction.

The Friends, using ACNGS funds, recently made a grant to the Commission of \$70,000 for the purchase of long lead-time parts and services for the restoration of C&TS locomotive 489. This grant was made at the request of RGRPC and the Commission so that the process of restoring 489 can begin this spring and, it is hoped, be completed in the fall of 2005. As of this date less than \$5,000 of the grant has been advanced.

The ACNGS fund has adequate assets on hand to complete the 489 grant and other small projects, including possible additional funds for the Antonito CRF and other historic preservation efforts this year. Outstanding pledges for the balance of 2005 and 2006 total about \$73,000 for each year. We are counting on the receipt of the unpaid pledges to fund other historic preservation needs this year and next.

However, our plans for the next five years are not small. This summer the Friends expect to announce plans for a major multi-year project in Chama, including a museum and interpretive center and possibly railcar storage and/or restoration facilities. While grants and outside funding will be sought, the backbone of our fundraising efforts will be the ACNGS fund and we will be initiating a major long-term fundraising effort to provide most of the funding for the new projects.

How You Can Help

The ACNGS fund was instrumental in keeping the railroad operating during the difficult 2002 and 2003 seasons. More recently, the ACNGS fund played a pivotal role in assuring that adequate funds were available to match the EDA locomotive grant, and that grant, with the Friends and Commission matching funds, was critical in getting three locomotives operational for the railroad. And, we hope our recent assistance is instrumental in getting engine 489 ready to go later this year.

But, we still need your help. If you've made a multi-year pledge, please make the 2005 payment on the pledge if you haven't already, and consider accelerating the 2006 portion into 2005. If you haven't yet made a pledge or gift to the fund, please consider doing so today. Our short-term goal is to position the fund with adequate reserves so that we have momentum when we start our next major fundraising campaign later in 2005.

While we are contacting additional potential ACNGS donors outside of the Friends, the core of our support will remain the Friends' members and other close supporters. We thank you for your wonderful support and generosity in the past and, with a sense of strong commitment and belief in the future of the railroad, ask for your continued support now and in the future. In the final analysis, it will be the Friends of the Cumbres & Toltec Scenic Railroad and its members that assure that Another Century of Narrow Gauge Steam is a reality.

Sincerely,

Tim Tennant President and CEO Bob Craine Director and Chairman, Development Committee

Please feel free to contact Tim Tennant, President & CEO of the Friends (timtennant@cumbrestoltec.org) or Bob Craine, Chair of the Development Committee (bobcraine@cumbrestoltec.org) if you have any questions or concerns.



This feature was the most exciting discovery of the project. Here the curved edge of a large sandy clay lens (seen approximately 1/3 from the bottom of the photograph) is contained by remnants of vertical siding believed to be from the structure that covered the 1885 turntable. The turntable was removed around 1900 but the timber structure that sheltered it remained until 1916.

Under direction of team leader Kammerer, George Swain and Rae Haynes excavate wooden piers on the site of the bunkhouse. Constructed in 1882, the bunkhouse was located south of the Cumbres section house. It was removed in the 1960s.





The three aligned features to the right center in this image define the outer wall of the coal bunker on the east side of the new snowshed.

Completed excavation of supports at south wall of the bunkhouse. Once photographs and measurements were completed, this and the other excavations were backfilled to protect them.



This view from the hill west of the tracks shows the entire footprint of the bunkhouse.



ANTONITO CAR RESTORATION FACILITY

by Dan Pyzel and Bill Lock Photographs by Ed Lowrance

Since the founding of the Friends of the Cumbres & Toltec Scenic Railroad in 1988, one of our organization's most important priorities has been the construction of a car restoration facility (CRF). This is needed to provide covered work space for maintenance and restoration of our historic fleet of passenger, freight, and maintenance of way equipment and for protection of the needed tools and materials. A CRF Task Force composed of Jerry Sahnd, Bill Kepner, Bill Lock, Warren Ringer, Brian Shoup, and Cal Smith was convened to determine the specific needs for such a facility, the types of projects to be undertaken therein, and the design parameters to best accommodate those tasks.

Several fundamental issues involving location, design, and purpose arose in planning a CRF in Chama, which led to the project being postponed; however, because of the generosity of donors and the availability of land, we have been able to build an excellent facility in Antonito. In 1989 the Friends were able to purchase lots 4 and 5 of a five-lot strip of land contiguous to the east edge of the C&TS property. We were able to secure donations that covered the entire purchase price of the two lots. The CRF Task Force recommended that a permanent car restoration facility be constructed on one of these two lots.

Since the Antonito C&TS property has not been designated a historic site, few architectural restrictions had to be placed on the design. The task force determined that a steel



The side columns have been erected, the roof trusses assembled and laid out inside the foundation, and the wood perlins are going into place.

structure would be the most cost effective. The facility envisioned was an enclosed steel structure sixty feet wide by up to 120 feet long with sixteen-foot-high walls and a twenty-four-foot height at the peak. Two roll-up doors twelve feet wide and fourteen feet high with a three-footwide service door between them were planned for the west end of the structure, and a single ten- by ten-foot roll-up door and another three-foot service door were planned for the east end. An inspection pit between the rails of one of the two tracks inside was also planned, along with skylights to take advantage of the natural light. An adjoining shop building would be constructed along the north wall of the building.

At this stage, after initial estimates to determine the final size that the Friends could afford, quotes for a sixty- by seventy-two-foot building which would hold four freight cars were sought from several vendors. Miracle Truss, a division of Miracle Steel Structures of Minneapolis, submitted the most satisfactory bid at \$54,728 for the



The CRF with the view to the east. The steel and wood perlins are complete.

necessary materials and their delivery to Antonito. This bid was presented to the Friends board members at the March 2004 meeting. The board members accepted the proposal, with delivery and construction to be done during 2004.

The town of Antonito has been extremely helpful and supportive in this endeavor. Several minor details with zoning and utilities went very smoothly with the help of the Town Board. Marvin Casias, the RGRPC Assistant Manager, along with his Antonito crew, helped with the excavation and foundation work.

Board member Ed Lowrance of Pagosa Springs, Colorado, was appointed team leader for the actual erection of the building. A special Friends work session was set to erect the building. As it turned out, the uncertainties of time and weather made it necessary to budget more than a one-week



The interior of the CRF.



The exterior of the CRF.

time frame to erect the building. Therefore, the foundation and erection phases of the construction were done by ALCON contractors of Alamosa during September and October of 2004.

Although the building itself is completed, it still needs track, floor, and utilities installed to be ready for use. The RGRPC has already begun work on the design and construction of the turnout and tracks to the building. It is planned to have these things completed in time for the work sessions during the summer of 2005.

— Dan Pyzel is a long-time member of the Friends. Bill Lock is a director and founder of the Friends. Ed Lowrance is a member of the Friends' board of directors.

FROM THE EDITOR ...

We always welcome articles, long or short, for the C&TS Dispatch. Have you been thinking of writing an article about the narrow gauge either pre- or post-1970? The topic could be a historical incident along the line. It might be about a person whose contributions to the railroad have made a difference. Perhaps you have a photograph that tells a story. Let me know if you are interested in writing for the Dispatch.

Art Nichols, 12209 Manitoba Dr. NE, Albuquerque, NM 87111; asn1307@aol.com

LETTERS

Locomotive Identified

In response to the photo of the worker-draped engine on page nine in the Fall 2004 issue, it appears to be a Santa Fe 3800-class 2-10-2, probably one of the ten numbered 3800-3809 based on the barely visible number plate in the photo. All of these 63-inch drivered engines were built by Baldwin in 1919 as oil burners with Walschaerts valve gear and Elesco feedwater heaters. The main drivers on all engines of this class were "blind," that is, without flanges, to allow them to better negotiate a shorter-radius curve. The engines originally operated at 220 psi boiler pressure, but by 1930 had been downgraded to 210 and after 1946 to 195, with a corresponding reduction in rated tractive effort. A number of this class worked over Raton Pass, and all of the first ten engines of this class, apparently including the one in the photo, were scrapped between 1949 and 1955.

Richard E. "Dick" Pennick Locomotive engineer, SD&A Ry. Spring Valley, CA

THE MOONLIGHT TRAIN RETURNS IN JUNE

The Friends is pleased to announce that this year there will be a Moonlight Train.

After a hiatus of three years, the railroad now has sufficient equipment to allow us to run the train on Saturday June 18, 2005. The departure will be in the afternoon from Chama and will include a steak dinner and return train ride under the almost-full moon.

Brochures will be mailed to Friends members, and as always members will receive a discount on the fare. Invite friends and relatives to experience the Cumbres & Toltec Scenic Railroad under unique and beautiful conditions.

Railroad Gatherings Staffed by Friends

January "The Big E" Amherst Railway Society West Springfield, MA Jim O'Keefe and Cal Smith. Cal reports 17,000 visitors attended and they handed out all 475 Friends brochures in their possession

February Mad City Model Railroad Show & Sale Madison, WI Bob Hey

March 12th Winterail 33 West Alpine St. - Stockton, CA Dick Seelye

June The Big Train Show Long Beach, CA Brooks Wilson, John & Joanie Cole

July National Railway Historical Society Convention Portland, OR Not presently staffed

Upcoming conventions in Kansas TBA Phil Miller



Locomotives 484 and 489 leaving Chama with the eastbound train, July 27, 1996. (Photo by Art Nichols.)

PHOTOGRAPHS WANTED

Do you have photographs from the 1980s showing the construction in Antonito of the seven "second generation" coaches known as the Chama cars numbers 510-516? Do you have photographs of the completed cars? If you have such photographs, I would like to hear from you. An article about these cars will appear in the C&TS Dispatch in the near future, and photographs of these coaches are needed. If you can help, please e-mail or telephone Art Nichols, editor, at asn1307@aol.com or (505) 296-7448.

Friends Library Responds to Inquiry

Rio Grande

ROYAL GORGE ROUTE

DENVER & RIO GRANDE

WESTERN RAILROAD

THRU THE ROCKIES-NOT AROUND THEM

SUMMER-FALL, 1940

The on-going expansion of the Friends Library is adding many items related to steam locomotive and railroad

operation. Some of this detailed information found a use recently. The shop force at the Nevada Northern Railway Museum, Ely, Nevada, was seeking documentation regarding maintenance intervals for No. 6-ET engine and tender brakes and for the long-obsolete K-type freight car brakes. Like the C&TS, the Nevada Northern operates very old rolling stock using old-style brake equipment.

The answer was found in two small books on the shelves of the Friends Library. These books were in the collection donated to the library by Joseph Calek, long time New Mexico resident and railroad enthusiast (see p.8 of the Winter 2004 issue). One book was an Association of American Railroads (AAR) manual on air brake maintenance, adopted in 1925. The other book was a Westinghouse Air Brake Company handbook for maintaining and overhauling K-type brake valves and equipment. These two items are only two of many similar volumes about air brakes now on the shelves. Copies of the relevant pages were made and sent on their way.

Amounting to almost 1500 items, the

Calek collection includes not only the group of railroad and locomotive technical works, some a century old and reflecting steam railroading of the early 1900s, but

railroad history books published over the past sixty years. Books and pamphlets from the collection are placed on the

now groaning shelves of the library as rapidly as they are cataloged. Materials address steam locomotive operations and maintenance to a fascinating level of detail. Of particular interest are enginemen's handbooks describing common road failures and giving instructions for bringing disabled steam locomotives back to their terminal.

Similar items now available cover a broad range of railroad technology and practice. Examples include regulations and maintenance manuals for obsolete air brake systems now found only on historic railroads, such as for the No. 6-ET engine and tender brakes or K-type freight car brakes. Details extend to the level of maintenance intervals and instructions for overhauling brake valves and cylinders.

In addition, the Friends Library contains a rich collection of C&TS materials of all kinds as well as many well-known railfan and history volumes.

The library is open to Friends members and is located in the offices of the Friends of the Cumbres & Toltec Scenic Railroad, 6005 Osuna Road NE, Albuquerque, NM 87109. Although the office is usually open weekdays, it is best to call in advance of a visit to be sure at (505) 830-1311. Materi-

als are not circulated, but are readily available for reading and review.

— Vernon J. Glover, Library Volunteer

Friends Buddy System

In the winter issue of the Dispatch, the new buddy system of the Friends was introduced. We pointed out that each time the Friends send a postal mailing to our 2000 members, the organization is spending dollars that could go toward preservation/interpretation work for the railroad. In a continuing effort to provide information to our members and encourage use of the Web site for news items, work session registration materials, or the like, we have initiated a Friends buddy system. With the help of member Lyla Howell, the Friends will connect a web user with a postal user by pairing them. If the postal member chooses

to do so, he or she would send self-addressed, stamped envelopes to the Web user. Each time a news item appears on the Friends Web site, a copy would be printed by the buddy and mailed. When the last envelope is used, the buddy will advise to send more. So, if you are willing to be a "sending buddy," let Lyla know by e-mail, lehowell@cybermesa.com. If you want to be a "receiving buddy," write to Lyla and she will make the connection-41 Owens Rd, Silver City, NM 88061.

— Nan Clark



2005 Schedule of Friends' Events

Volunteer Work Sessions

May 9—13, Session A May 16—20, Session B June 13—17, Session C June 20—24, Session D August 1—5, Session E August 8—12, Session F

Opening Day May 28 Annual Meeting

June 17

Moonlight Train June 18



On December 4, 2004, Santa Claus (Tom Cardin) greeting Chama author Jill Lane on the Christmas Train from Antonito. Looking on from their seats are Claire and Jamie English. Santa boarded the train at Lava Tank. (Photo by Warren Smalley.)



Friends of the Cumbres & Toltec Scenic Railroad, Inc. 6005 Osuna Road NE Albuquerque, New Mexico 87109

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