



# C&TS Dispatch

Vol. 13 No. 1      SPRING 2000

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## Friends Affiliate to Operate Railroad

### ***Commission Awards Five-Year Contract to Nonprofit Rio Grande Railway Preservation Corporation***

On March 1 in Albuquerque, New Mexico, The Cumbres & Toltec Scenic Railroad Commission awarded a contract to operate the railroad to the Rio Grande Railway Preservation Corporation, an affiliated supporting organization of the Friends of the Cumbres & Toltec Scenic Railroad. The lease is for five years, with the option of two five-year renewals. Warren Smalley, a Friends director and president of the new organization, said that "we plan to open on schedule next Memorial Day weekend." In addition to Smalley, directors of the affiliate are John West, vice president; Richard Cowles, treasurer; Joseph Vigil, assistant treasurer; and Geoffrey Gordon, secretary. Cowles and Gordon are also Friends directors. The new corporation will put a paid staff in place, hiring many of the same professionals who have served with such dedication over the years. The Friends Board of Directors elects the board of the Rio Grande Railway Preservation Corporation and administers the grants to the new corporation.

The search for a new operator began after the commission terminated the operating lease of the C&TSRR Corporation in October 1999 for breach of contract, including failure to maintain the railroad property. In

response to the commission's Request for Proposal (RFP) issued on November 13, 1999, the commission announced at its December 12 meeting that four proposals to operate the railroad had been received: Chippewa Northwestern, Lincoln, Nebraska; Old

the four organizations the opportunity to amend their proposals and to allow other rail operators who did not meet the original deadline the chance to submit proposals. On December 21, an amendment was issued by the commission to address questions and concerns



*Thanks to the Friends and the new corporation, the C&TSRR will continue steaming into the 21st century. Pictured here on July 26, 1996, a train filled with summer visitors heads to Antonito. (Photo by C. Heroneme.)*

Santa Fe Land & Cattle, Ltd., Albuquerque, New Mexico; Rail Ventures, Louisville, Colorado; and The White Pass & Yukon, Skagway, Alaska. The commission's selection committee found the four proposals to be significantly noncompliant. The selection process was continued in order to give

of bidders and other interested organizations, and January 12, 2000, was set as the proposal submission deadline. The deadline was later extended to January 19, 2000.

*See Railroad, page 10* →

# C&TS Dispatch

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<b>Roger Briggs</b>	<b>Geoffrey Gordon</b>
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<b>Arthur Nichols</b>	<b>William Lock</b>
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<b>Warren Smalley</b>	<b>Jerry Sahnd</b>
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The C&TS Dispatch is published four times each year by the Friends of the Cumbres & Toltec Scenic Railroad, Inc., 5732 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 support group for the Cumbres & Toltec Scenic Railroad, a 64-mile-long operating railroad and museum of railroad history and technology between Antonito, Colorado, and Chama, New Mexico. The railroad is owned by Colorado and New Mexico and is operated by the Rio Grande Railway Preservation Corporation. As the museum support group, the Friends is dedicated to the preservation and interpretation of the railroad. The Friends is an Affiliate Member of ARM (Association of Railway Museums) and a Member of TRAIN (Tourist Railway Association).

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

## Cumbres & Toltec Scenic Railroad



Denver & Rio Grande Railway—1880 to 1886  
Denver & Rio Grande Railroad—1886 to 1921  
Denver & Rio Grande Western Railroad—1921 to 1970  
Cumbres & Toltec Scenic Railroad—1970 to 2000

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## PRESIDENT'S COLUMN



Last November when I wrote to all of you to ask you to renew your support for the Friends, I closed the letter with the statement that this year, more than ever, we the Friends could make a difference in the life of this railroad. It is truly amazing how we have seen this borne out.

The lead story tells you the news that the Friends, through a new affiliate company, are now the operators of the railroad. This was an outcome we didn't expect when the Railroad Commission began its search process last October, but one that we are very pleased about. We believe a not-for-profit operation is best for the railroad.

We began in late January to put together an alternative plan to the Commission for the operation of the railroad. When we amassed pledges to meet the Commission's requirement of \$300,000, we began exploratory talks with potential candidates for general manager and started creating an operating plan. A dedicated group of Directors and others have worked long hours to brainstorm and write the proposal we presented, carry out lease negotiations with the Commission, get a written document into final form, create a reservations system and put it into place, design a new brochure, and interview initial office staff. It was a huge effort and we are grateful for such a talented group of people willing to devote themselves to this effort.

We are doing well as we aim at opening service on May 27th. Personnel have been hired, work on locomotives continues, track work will begin soon, and ticket orders are running strong. The state funding we have worked for is almost complete—the final vote on Colorado funding passed the legislature on March 31, 2000, and the bill is on Governor Owens' desk. A special Friends' work session in May will focus on the passenger coaches, helping the new operator to get them ready for opening day by repairing seats, windows, and doors and readying the braking systems.

And, as noted elsewhere, my husband and I are moving to Albuquerque. I have retired from my law practice to devote my full energies to the furtherance of the Friends' mission. I will continue my current duties and lead expansion of fundraising and membership development. I will be able to coordinate our activities in Chama from a closer location. I am excited about the opportunities that await.

A final note: maintaining and building ridership is an important goal for the railroad this season. If you or someone you know has been thinking of riding the C&TS, do this year!

—Terri Shaw 🌻

## Smalley and Craine New Board Members

At the Friends Board of Directors meeting on February 12, Warren Smalley was elected to fill the vacancy created by the tragic death of Ralph Flowers. Warren has been an active member of the Friends for several years and has attended work sessions for the past three years. He lives in Albuquerque and is president and CEO of New Mexico Mutual Casualty Company.

At the March 10 board meeting, Robert Craine was elected to fill the vacancy created by the resignation of Craig Kumler. Robert has been a volunteer at the summer work sessions. He lives in Tulsa, Oklahoma, and is president and CEO of Capital Ventures, LLC.

## Shaw to be Executive Director

A milestone in the evolution of the Friends was reached with a decision by the Board of Directors to hire a full-time executive director. The growth and expanded roles of the organization have created demands that cannot be efficiently met with only a part time and volunteer staff. In particular, an executive director is needed to direct expanded fund raising. Terri Shaw, president of the Friends, volunteered for the position, and the board unanimously agreed to hire her. She will assume her new duties on June 1, 2000, and continue to serve as president. Terri and her husband, Howard, will move from southern California to Albuquerque.

## Salisbury Appointed to Commission

Governor Owens of Colorado has appointed Carol Salisbury to the Cumbres & Toltec Scenic Railroad Commission. She replaces Wayne Quinlan and will serve as the commission's treasurer. Carol is a Friends member and for the past two summers has been a member of the

train host team. She is Northern Colorado Field Representative for U.S. Senator Wayne Allard.

## APPROPRIATION STATUS

The Friends have been assisting the Railroad Commission in its efforts to obtain funding from the states of Colorado and New Mexico to help cover the costs of deferred maintenance which has accumulated over the past few years on the C&TS. We advocated appropriations of \$400,000 from each state to cover such expenses as the purchase of supplies for locomotive rehabilitation, salary for crews, and matching funds to secure an \$800,000 Federal EDA grant for track renovation. On Tuesday, March 7, Governor Johnson of New Mexico signed a bill appropriating \$400,000 to the Railroad Commission. The final awarding of this money is contingent on Colorado matching it, and the status of appropriation requests in Colorado is not yet final. On Monday, March 6, Governor Owen of Colorado signed a bill that contained \$100,000 of the requested money for the commission. And on Thursday, March 9 a bill for another \$200,000 was unanimously reported out of the Joint Budget Committee. The appropriation process in Colorado is more complex than in New Mexico, where a single bill was drafted and ushered through the legislature. In Colorado, the appropriation is separated into a number of sub-bills, which are still winding their way through the legislature. Final action is expected by May 30.

## General Manager Selected for the C&TS

The Rio Grande Railway Preservation Corporation has announced the appointment of Edward M. McLaughlin as General Manager of the Cumbres & Toltec Scenic Railroad. McLaughlin brings many years of experience in both railroad operations and steam locomotive maintenance to the C&TS. Most recently he managed a freight car repair facility and handled engineering for ocean-going, deck loading of over-dimen-

sional cargo. Previously, he was CEO of the 300-mile Northwestern Pacific Railroad, which handled both freight and seasonal passenger service, and president and general manager of the Fort Worth & Western, a freight and steam excursion railroad. In the 1970s, McLaughlin was general superintendent of the steam-powered Texas State Railroad. He is scheduled to start his new assignment at the beginning of April.

### *To the Friends . . .*

*Words cannot express what is in my heart! I can only say "thank you, thank you" for your generous giving to the C&TS in Ralph's name. A special way to honor him and bless us. He would have been pleased.*

*With gratitude,*

*Mrs. Ralph Flowers and Family*



*I am grateful that your gift to the C&TS will enable this railroad, which Mike so dearly loved, to continue to thrive and be there for fellow train enthusiasts. I know that many people worked very diligently to see that the railroads were there for Mike—this truly was his lifeline!*

*I ask that you continue to keep me in your thoughts and prayers. I feel Mike's presence whenever I hear the soulful sound of a train, and that sound has been a very frequent companion of mine these past months. May God bless you for your ongoing generosity to the C&TS. I too promise you my prayers of thanksgiving for however you may have touched Mike's life.*

*With a heart full of gratitude for friends like you,*

*Mrs. Kay Hipskind*

## WINTER SHOP WORK 1999–2000

by Tom Cardin, with Gerald Blea

There are times in a person's life when pride has a place, and all of the Friends should feel that pride. Because of the Friends' unselfishness, the Cumbres & Toltec Scenic Railroad will ride again.

### 497

A lot has been accomplished, and 497 has received much of the attention. The drivers have been turned in Durango and are back in Chama ready to be installed. The driver boxes have all been built up and machined to specifications and all the brass is ready to be machined and fitted in place. The third set of drivers will be installed first as it is the base for "trammimg" the engine. The driver boxes are the key to the whole thing, as they have to be installed correctly so the side rods will work efficiently. Everything has to be measured to fit and be in tram. There was a lot of work done on 497 before the boxes were tackled. The boiler was checked for thickness using ultrasonics, and staybolts were replaced. The air pump is being worked on to bring it back to sound operation. The "skin," or the sheet metal and insulation, were removed to allow all this to take place.

### 463

The next in line for help is 463. The boiler has been unwrapped and has gone through the same inspections as 497. The pistons were checked and the crew found a spring that fits under the piston rings was weak, preventing the rings from fitting tightly in the cylinder. This is probably the reason that 463 was steaming so badly. The spool valve rings are going to be replaced, and that will help. A couple of flues need attention, and several studs holding the superheater header inside the smoke box were replaced.

### Tender Trucks

Two tender trucks had their bolster cups and bearing boxes rebuilt. There were serious cracks and wear in both of the pockets so the shop crew made new plates and braced and welded them in. The bearing boxes had a lot of metal



Gerald Blea unloads newly turned drivers for 497. The flange profiles were turned in Durango. (Photos by Tom Cardin.)



Engine 497 sits high and dry with all the drivers sent to Durango for turning new flange profiles on the tires. Boiler sheeting and insulation have been removed so the thickness of the boiler could be checked by ultrasonics.



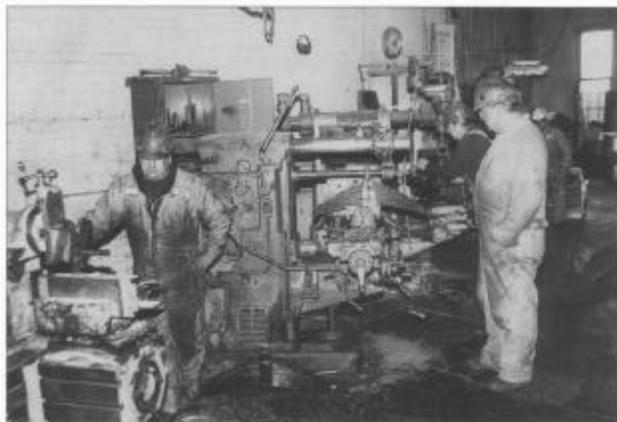
Overall view of 497 (left), 463 (background), and 489 in the Chama enginehouse.

replaced by welding and then grounding down to size. This looks like the first time anybody has gone that far to repair trucks.

### Accolades for the Shop Crew

Last week there were five machines all working. Most of the time is spent setting up the machines and then watching them do their stuff. Sometimes tools must be made that are required to do the machining. All the old techniques have been passed by with progress, but we still have the same old requirements for the same old engines. We are fortunate to have crew members who are craftsmen as well as inventors when the job requires it. Although everyone is working on a job, each one is ready to help someone else with a problem. The shop crew is truly one-of-a-kind!

Tom is a long-time volunteer and the photographer for the C&TS Dispatch. Gerald is a veteran on the C&TS and served as shop supervisor this past winter. 🍂



*Orlando Ulibarri (left), Donald Martinez, and in the background Ed Beard and Gerald Blea working on four machines in the Chama shop. Other members of the shop crew this winter are Marvin Casias, Tommy Garcia, and Mark Yates.*



*Gerald Blea watches and directs as rebuilt tender trucks are being removed from the enginehouse to make space for another set to be rebuilt.*

## Help Wanted

To more efficiently use our resources, we need an accurate inventory of our tools and materials. We need a few good people who are familiar with hardware to stay in Chama the Saturday and Sunday after session D, August 19 and 20, to aid with the inventory. Please contact Don Metzler at (623) 937-6690 or e-mail <n7ukn@amug.org>.

## Year-Round Opportunity at the Western Museum of Mining & Industry

The work crew meets every first and third Saturday of the month at The Western Museum of Mining & Industry in Colorado Springs, starting about 9:00 AM. The museum is located at the Northgate Blvd. exit to the east of I-25. All members and the general public are invited to participate. For further information contact Roger Briggs at (719) 495-4973 or Jerry Sahnd at (719) 573-5688, email <JBSahnd@prodigy.net>.

## Report from the Project Planning Committee

*by Roger Breeding*

Most of the projects planned for the summer of 2000 are continuing ones from previous years, but there are several new projects. Roy Blizzard and Tony Kassin and their crew worked like beavers during sessions C and D last summer and finished rebuilding wheel and tie car 06092. This year they are going to start on rail and tie car 06051. Tony and Dave Sands propose to remove the decking during session A to get a head start and determine how many long beams have to be ordered for replacement sills.

Another new project is the refurbishing of the telltales and railings at Rock Tunnel. Cal Smith, who noticed their deteriorated condition, will lead this effort. (There are no telltales at Mud Tunnel; would anyone who knows why there are telltales for Rock Tunnel and not for Mud Tunnel please let me know?)

The passenger cars appeared to be suffering from neglect at the end of the 1999 season. Car hosts reported that there were numerous small items such as sticking windows, torn upholstery, and hard-to-open doors that the Friends could repair. Because the new operator, the Rio Grande Railway Preservation Corporation, will not have much time to make these repairs before the start of the season, we have scheduled a preseason session in May to put the cars in better shape. A fairly large number of people have indicated an interest in this work, and we hope to have a large turnout.

Jim Herron's building painting crew will be turning their attention to the Cumbres section house this summer. Bob Ground tells us that the restoration work is far enough along that all the exterior work is complete.

Work on Pile Driver OB in Colorado Springs has been progressing all winter under Roger Brigg's direction. This summer Roger will be in Chama, and he will place siding on the outside of the frame of caboose 05635. Many years ago when the operator at the time turned stock car 5635 into a charter caboose, he neglected to place siding on the outside of the frame, creating the monstrosity at which we have winced ever since.

And, of course, this summer there will be the ongoing projects. At Antonito work will continue on the restoration of flat car 6708 and caboose 0579. Interior remodeling will continue at the Osier section house and station. Interior remodeling will also be an ongoing project at Cumbres. Maintenance-of-way projects will be tree clearing and installation and touching up mileposts and whistleboards along the line. Chama, as usual, has the greatest variety of ongoing projects: car painting and lettering, planning and installation of interpretive displays and exhibits, reefers 55 and 163, running gear work, the coal tipple's hoist system, flat car 6214, flangers, inspection car MW02, and stock pen chutes.

*Roger is co-chair, along with Bob Akers, of the Project Planning Committee. Roger is also a Friends director.* ✎

## TRACK DON'T GET NO RESPECT

by Keith E. Hayes, AIA

When I watch a train go by, I cannot help but look down at the wheels rolling along the steel rails. If you have done this, you might have noticed that railroad track is very dynamic. We might think the steel rails and wood ties provide a solid foundation for the train to move along, but the reality is quite different: track moves!

Pardon me while I demonstrate some math. Published tables indicate that the Rio Grande specified 16 ties per 30-foot section of rail on the narrow gauge, a tie every two feet or so. Locomotive 487 weighs in at 187,100 pounds, 143,000 of which are borne by the drive axles across some 12 feet of track—six cross ties. Assuming that the load is distributed equally (which it is not, by the way) over the 12 feet, each of the six ties supports almost 24,000 pounds! And that is just the direct weight of the locomotive, not accounting for the side-to-side movement of the driving rods. So it is easy to see why the track moves up and down when a train travels along.

Rails on ties are what hold railroads together. The system we see today started as log rails on log ties and took about thirty years to develop into the T-shaped rail we are familiar with today. When the Cumbres and Toltec was constructed in the 1880s, track was still pretty crude. Early rail was very light, weighing 40 pounds per yard, barely taller than the top of a man's boot, judging from historic photos. If trees were available, they were harvested along the way for cross ties or shipped from the closest available source. Either way, the logs were rough hewn and untreated: level the ground, place the ties, spike the rail in place, and start running trains.

Track has improved since 1880. Ties are now sawcut and treated with preservatives with pre-drilled holes for

spikes. And the rails are not spiked directly to the ties anymore: they rest on tie plates, steel plates with holes for the spikes and a flange to locate the rail. Heavier rail was installed along the narrow gauge too—up to 85 pounds per yard now—as it became surplus along the standard gauge. Of course, main line railroads also build-up the road bed with ballast—a layer of rock that both helps level and stabilize the track and encourages good drainage. Only portions of the Cumbres & Toltec have true ballast: all of the railroad was built on native soils, and you are more likely to find cinders between the ties than rock chards.

Track wears out though. Each of the section villages—Sublette, Osier, and the others—was home base to crews whose sole job was to maintain track. Men would regularly walk the length of their section, surveying the condition of the track, adjusting the gauge between the rails, and replacing worn rail and ties. This job is ongoing, although today the crews live in Antonito and Chama. Hundreds of ties are replaced each year, and the recently awarded Federal grant will contribute to upgrading the track where it is most needed.

*Keith is a long-time volunteer. His column appears regularly in the C&TS Dispatch.* 🍷

## Tidbit of Roundhouse History

by Mark Yates

Walking to the south entrance of the boiler room and machine shop in the Chama yard, one can see above the door and to the left that only a single brick remains of the original arched doorway and that oversize bolts protrude to the left of the door. The original south doorway was the same design as the west doorway; the sliding door on the south entrance is a recent addition. Upon entering the boiler

room through the south door, one immediately notices the reinforcing vertical boards attached to the wall above and to the sides of the doorway. Fifty-two years ago there was an accident.

On November 1, 1947, a hostler helper was moving engine 486 to the roundhouse, which at that time had five stalls; four of the original nine stalls to the east were razed in 1944. The turntable had also been removed, and only the two west stalls, which exist today, were used for locomotive servicing. While the hostler helper was moving engine 486, it “collided with engine 481, shoving engine 481 into [the] roundhouse wall.” The noise of brick crumbling and the boilers being shoved aside or ahead of 481 must have been horrific. The hostler helper must have thought that he would most certainly be fired. For all the damage that must have occurred to the roundhouse, the boilers, and engine 481, one would think that it would have cost thousands of dollars to repair. But damages were assessed at only \$345. The accident may have resulted in the loss of one of the boilers used to provide steam heat to the buildings in the Chama yard.

Surely the hostler helper was fired for such an act. However, he was not according to D&RGW document “Discipline Assessed—Alamosa Division—Month of November 1947.” Under the category of Dismissals, it states “None.” Under Demerits, “one fireman, assessed sixty (60) demerits responsibility in violation of Operating Rule 905, resulting in damage to roundhouse wall.” This writer’s understanding of demerits is that more than 60 demerits resulted in dismissal from service.

For readers interested, Operating Rule 905 applies to firemen and states, “He must not run an engine in the absence of the engineman unless in some emergency he is directed to do so by the conductor or someone in authority.”





South doorway of Chama boiler room and machine shop. The single brick of the original arched doorway is above and to the left of the door. (Photos by Tom Cardin)



Arched doorway on the west wall of the boiler room and machine shop.

This author surmises that in an effort to save time, the hostler helper was moving engine 486 alone and was either not paying attention to switches or intended only to couple to engine 481 in order to move it outside when the accident occurred. Fortunately, no one was injured. This hostler helper, in one moment of misjudgment, left an indelible mark on the round-house.

Information about this accident was

obtained from D&RGW Circular No. 2906, "Reportable Train Accidents Occurring on the Alamosa Division, Month of November 1947" by L. H. Hale, Superintendent (Alamosa, Colorado, December 2, 1947); D&RGW Circular No. 2916, "Discipline Assessed—Alamosa Division—Month of November 1947"; and The Denver and Rio Grande Western Railroad Company, *Rules and Regulations of the Operating Department, 1938*.

Mark Yates is a long-time member of the Friends and employee of the C&TS.

Photo at right shows the doorway and interior of the south wall of the boiler room and machine shop with reinforcing boards attached to the wall.

## BOOK REVIEW

***Empire Express: Building the First Transcontinental Railroad***, by David Haward Bain (Viking-Penguin Group, Penguin Putnam, Inc., 375 Hudson St., New York, New York 10014, \$34.95 U.S., \$48.89 Canada, hardback, maps, photographs, 797 pp.)

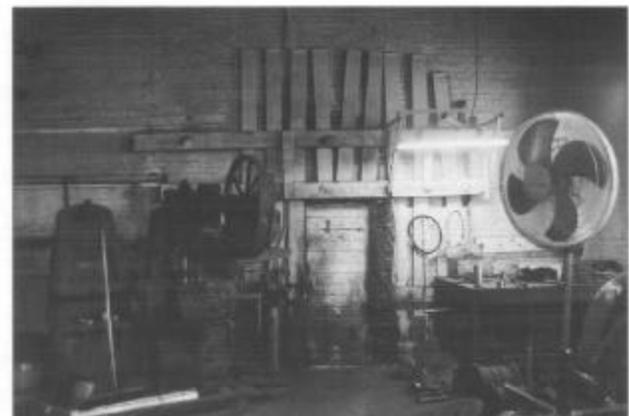
A monumental book—no pun intended—both in size and content. It took the author, a professor at Middlebury College, fourteen years of research and writing to produce as complete a history of the construction of the railroad as exists. He delves into financial and political management and mismanagement, practical problems, and the human cost. The story is set in the larger picture of American history from the 1830s and '40s to the halls of Congress and scandal by 1873.

The first known dreamer of a railroad connecting Americans east of the Mississippi River to the California coast was Asa Whitney—a fifth cousin of Eli Whitney. Nothing came of it. By the 1850s, however, Theodore D. Judah, a California engineer, began laying out the practical route over the Sierras. He went east to try to raise money, both private and government. His untimely death and the Civil War appeared to stop the project, except that the Lincoln Administration and Congress continued to support it. Lack of money and the war delayed any real progress, however, until the post-war years. Then work began from both ends and concluded in 1869 at Promontory Summit. A cause for national jubilation!

Imported Chinese labor drove the road up and over the Sierras at Donner Pass. They were discriminated against, paid less, but earned the admiration of the most critical bosses. Large Irish gangs drove the road west across the plains, through hostile Indians, and frightful weather. Of course, the railroad would end the Plains Indian way of life.

The financial and political machinations are a marvel of determination and scandal—bribes of Congressmen, hidden assets, and all the rest, came to light after the meeting of the rails. As the title says, that railroad was instrumental in building an empire.

—Spencer Wilson 🍀



## NARROW GAUGE NEAR AND FAR: NO. 16

### History of Early D&RG Narrow-Gauge Locomotives

by Earl G. Knoob

Normally when one thinks of the locomotives of the Denver & Rio Grande's narrow-gauge lines, one's mind immediately creates mental pictures of K-36s blasting up Cumbres with loads of Gramps oil, or a spit and polished 470 hustling the Shavano over Marshall Pass. However, this is only about half the story. The D&RG had been in business over fifty years by the time these locomotives came into existence. The earlier motive power is what we will be looking at in this issue.

#### The First Locomotives

When the D&RG laid its first rails from Denver to Colorado Springs in 1871, they purchased nine locomotives from Baldwin Locomotive Works. The D&RG would become a good customer for Baldwin. With a couple of notable exceptions, all the D&RG's pioneer locomotives were built by Baldwin.

In this initial order were four 2-4-0s for passenger service and five 2-6-0s for freight service. Numbered 1-9 they also carried names such as Montezuma, Tabi-Wachi, Ouray, and Arkansas. Weighing between 12 and 15 tons each, they came with small, four-wheel tenders, except 8 and 9, which came with six-wheel tenders. These tiny machines were quite suited for hauling the four-wheeled and small double-trucked freight and passenger equipment the D&RG owned at that time. In viewing these small locomotives, there is little doubt where the term Baby Railroad came from.

This roster satisfied the motive power needs for a couple of years. As the rails continued south toward Pueblo in 1873, a few more locomotives were ordered. From Baldwin came more 2-6-0s, 10 (San Carlos), 11 (Cucharas),

and 12 (Las Animas). Numbers 11 and 12 were unique in that they came with two steam domes on their straight-top boilers. However, by far the most unique locomotive to ever grace the roster of the D&RG showed up in 1873. Built in England by Vulcan and presented to the D&RG as a gift from the Duke of Sutherland, 13, the Mountaineer, was a double-boilered 0-4-4-0 Fairlie type. But 13 was never a very successful locomotive. Within a year it was renumbered 101 to make room for other locomotives on the roster.

The next locomotives were not purchased until 1876. As trains grew in length, larger designs were needed. Four larger 2-6-0s were built (numbered 13-15 and 19) along with three 4-4-0s (numbered 16-18) weighing 18-20 tons each. All were equipped with conventional eight-wheeled tenders. In 1876, the D&RG reached the base of La Veta Pass. Ahead of them was to be the D&RG's first dose of mountain railroading.

#### Mountain Railroading

With the long, steep grades of La Veta Pass before them, the D&RG was forced to re-think its ideas of locomotive design. Obviously, the very small locomotives on its roster would be rather useless on the 4 percent grades they were about to construct. In 1877, the D&RG bought two 24-ton 0-6-0 switch engines, 20 and 21. Breaking tradition, these were the first locomotives not to be christened with a name in addition to the number. Another 2-6-0, 23, the Trinchera, identical to those purchased in 1876, was added to the roster. The most significant additions to the roster were engines 22 (Alamosa) and 24 (Mosca). These were both 2-8-0 types—the first locomotives of this wheel arrangement on the D&RG. Number 22 weighed 30 tons whereas the 23 was a bit lighter at 28 tons. Both of these locomotives were built with wagon-top boilers.

In 1878, the D&RG completed its crossing of the Sangre de Cristo range

over La Veta Pass and reached its namesake river at Alamosa, Colorado. In that year, they purchased three more 2-6-0s identical to those of 1876-77 numbered 27-29, and a 4-4-0 numbered 26, named Rio Bravo. Locomotive 26 was different from earlier 4-4-0s in that it was built with a conventional wagon-top boiler. Deciding that the 30-ton bulk of 22 was a bit much for the light-weight track, the D&RG received four 28-ton 2-8-0s numbered 25, 30, 31, and 32 for use on La Veta Pass. These locomotives, as well as the remaining 2-8-0s were built with conventional straight-top boilers.

The famous Royal Gorge War with the Santa Fe prevented the D&RG from extending its mileage in 1879. In that year, they took delivery of six more 28-ton 2-8-0s numbered 33, 34, and 37-40 with names such as Silver Cliff, Royal Gorge, Mancos, and Chama. They also took delivery of two 4-4-0s, 35 (Culebra) and 36 (San Juan). These 4-4-0s were identical to the one purchased in 1878.

#### The Era of Expansion

With the Royal Gorge War finally settled, in 1880 the D&RG embarked upon an era of incredible expansion, building the San Juan Extension, the Santa Fe Extension, and the Royal Gorge line into the upper Arkansas River Valley. To power these lines, the D&RG took possession of 43 more 28-ton 2-8-0s numbered 43-84, three more 4-4-0s identical to earlier designs numbered 89-91, nine slightly larger 4-4-0s numbered 85-88 and 92-96, and two 0-6-0 switchers numbered 97-98 (without names). With the improvement of the track, the D&RG ordered more of the slightly larger 30-ton 2-8-0s, 41 and 42.

As work continued on the various extensions to Durango and across Marshall Pass into Gunnison in 1881, the D&RG took delivery of another large order of locomotives. Number 83, the Sierra La Sal, destined to be the last of the small 28-ton 2-8-0s, was



delivered in early 1881. Three more 4-4-0s of the same design as those built in 1880 were delivered and numbered 99-101, and the D&RG received its last five narrow-gauge switchers, numbered 102-106. A new design of 2-6-0 was also constructed. These locomotives had larger drivers than earlier examples. It was hoped that the new 2-6-0s could handle the passenger trains on the steep grades better than the 4-4-0s. The largest lot of locomotives delivered in one year to the D&RG took the form of 49, 30-ton 2-8-0s arriving from Baldwin and Grant Locomotive works. The Grant locomotives were numbered 200-221 and 223 while the Baldwin locomotives were numbered 240-255. In the midst of this order, it was decided that naming locomotives was no longer necessary (or perhaps they were running out of names). Grant locomotive 214, the Nevada, and Baldwin locomotive 248, the Comanche, were the last locomotives with names. Also in 1881 the D&RG took delivery of a larger yet class of 2-8-0s weighing 35 tons. These locomotives were numbered 400-411. Apparently the thought of not naming locomotives did not apply to these locomotives as they were given such names as Green River, Cumbres, and Red Cliff.

1882 saw the D&RG's completion of its line from Gunnison through Grand Junction to the Utah State Line as well as its extension to Silverton. This year also saw the remainder of the 30-ton 2-8-0 orders from Grant and Baldwin arrive. The Grant engines were numbered 222-224 and 227, while the Baldwin engines became numbers 256-291, 294, and 295. The large-drivered 2-6-0s delivered in 1881 did not perform very well, so the first 4-6-0s were built, numbered 158-165.

As the D&RG's Utah subsidiary, the Denver & Rio Grande Western Railway, was busily building across the Utah deserts in 1883, the D&RG took one last try at the 4-4-0 wheel arrangement by taking possession of engines 107-109. These 4-4-0s were slightly larger than previous designs.



*D&RG class 42 locomotive 88, Ptarmigan. Built in 1880 when the D&RG was opening up the San Juan Extension, the Santa Fe Extension, and the Royal Gorge line. Later the locomotive was Carmen Salt Co. 92. (Photo courtesy of M. D. McCarter, reproduction rights reserved.)*

Larger 4-6-0s arrived in the form of locomotives 166-171.

#### **Standard Gauging the Mainlines**

In 1883, the D&RG fell into deep financial trouble. Eventually, the D&RG was reorganized and the Utah lines emerged as a separate company. The new management of the D&RG felt they had more than enough narrow-gauge locomotives and focused their attention on standard gauging the mainlines. It was not until 1887 that the D&RG took delivery of any more new narrow-gauge locomotives. These locomotives, numbered 417-422, were similar to the previous 35-ton 2-8-0s but had a few mechanical differences.

By 1888, standard gauging of the mainlines was in full swing, and it had become apparent that most of the tiny 2-4-0s and 2-6-0s of 1871-73 vintage had long outlived their usefulness. Many of the 2-6-0s were converted to 0-6-0 switchers, which extended their lives a bit longer. Most of the 1-13 series (along with the infamous 0-4-4-0 Fairlie—now 1001) were scrapped in 1888. The sole survivor, 12, the Las Animas, was converted from a 2-6-0 to a 0-6-0. It managed to survive until 1899, when it was sold. With the standard gauging of the mainline to Salt Lake City in 1890, there soon was

a large surplus of narrow-gauge power. Most of the 4-4-0s were sold to various railroads. Several ended up on south-eastern logging railroads, while the earliest small examples were scrapped. All of the medium sized 2-6-0s of the 1877-78 era, except one, were sold to logging companies, including two that were sold to the Tierra Amarilla Southern.

The Rio Grande Southern purchased a large number of the surplus locomotives in 1891. Their purchase included 19 of the 30-ton 2-8-0s of the 200 series, three of the first series of 4-6-0s, nine of the smaller 28-ton 2-8-0s, and one each of the 4-4-0s and 0-6-0s and the one remaining 1877 era 2-6-0.

The large drivered 2-6-0s numbered 150-154 were disposed of by selling and scrapping in the 1890s. The last one, 152, was dismantled in 1899. Its boiler went to the recently rebuilt roundhouse in Chama, New Mexico.

In 1900, the D&RG still had three of the 1880 vintage 4-4-0s on the roster along with two of the 0-6-0 switchers. Only four of the earliest 4-6-0s were left. All of the newer 4-6-0s were in service. Forty-one of the small 28-ton 2-8-0s were around. Fifty-one of the 30-ton 2-8-0s and twenty of the larger 35-ton 2-8-0s remained on the roster.

*See History, page 10 →*

## History, continued from page 9

By 1910, attrition and sales to other railroads had reduced the number of small 28-ton 2-8-0s to nine. In 1911, the new Interstate Commerce Commission boiler regulations came into effect. These new laws would require reboiling most of the pre-1890 locomotives. Because of their small size, none of the small 2-8-0s or the small 4-6-0s were rebuilt and all had disappeared by 1916. The last small 2-8-0 (also known as Class 56) to survive was 74, the *Hermano*. It was sold to the Rio Grande Southern in 1891 and then resold to Sumpter Valley Railway in Oregon in 1900. The SVRY ran it until 1924 and scrapped it in 1936.

### Modern Locomotives

With the arrival of the modern narrow-gauge locomotives in the 1920s, the smaller power was set aside and scrapped. By 1927, only six of the 1883 4-6-0s (now classed T-12) were left. Twenty-two of the 30-ton 2-8-0s (now classed C-16) remained, ten of the 1880 35-ton 2-8-0s (now classed C-19) were in service. Six of the 1887 35-ton 2-8-0s (now classed C-17) were on the roster. By the time of the Great Depression, the numbers had dwindled further with only 4 T-12s, 17 C-16s, 10 C-19s, and 3 C-17s remaining.

The last two T-12s, 168 and 169 were retired in 1938 and 1941. By 1940, the only remaining C-16s were numbers 223, 268, 271, and 278. Locomotive 223 was retired and placed on display in Salt Lake City in 1941; 271 was sold to the Montezuma Lumber Company in 1941 and was scrapped in 1946; 278 was placed on display in Montrose, Colorado, in 1953; and 268 was donated to Gunnison, Colorado, after abandonment of the lines around that area in 1955.

By 1940, only four of the C-19s were left. Number 340 (former 400) was sold to Knott's Berry Farm in 1952, 345 (former 401) was scrapped in 1951, 343 (former 402) was scrapped in 1941, 346 (former 406) was sold to the Montezuma Lumber Company in 1946 and purchased by Robert Richardson in 1951. It now survives at

the Colorado Railroad Museum in Golden.

It is indeed a pity that of the more than 300 locomotives that were built for the Denver & Rio Grande between 1871 and 1887, that so few survive today. But again, perhaps we should be happy with those few survivors we do have amongst us in the 21st century.

*Earl is a consulting director of the Friends.* 🐾



*The eastbound passenger train crossing Cascade Trestle, 1-1/2 miles west of Osier, Colorado, summer 1997. (Photo by Mike Oestreich.)*

## Railroad, continued from page 1

The commission announced at its January 22 meeting that three proposals had been received: Chippewa Northwestern; Rail Ventures; and San Juan Mountain Railroad, Albuquerque, New Mexico. Further discussions were held with Rail Ventures and San Juan Mountain Railroad so that a correct and clear determination of merit could be objectively made. At its January 29 meeting, the commission announced that it had rejected the two proposals. With this development, the commission authorized its executive director to pursue other options for the 2000 season: contract with an operator, rewrite and reopen the RFP process, or operate the railroad itself.

The commission now moved into a "fast track negotiation process" to ensure an operator for the 2000 season. On February 16, the commission announced that they had "contacted several existing tourist railroad operators and the Friends of the Cumbres & Toltec Scenic Railroad, who expressed an interest in becoming the operator. Four of the six entities contacted declined the invitation to submit a proposal. . . . The White Pass & Yukon Railroad proposal is for them to be the management team only, and the commission as the operator."

On February 12, the Friends Board of Directors had voted unanimously to accept the invitation of the commission to submit a bid for operation of the railroad. The Friends had raised over \$300,000, which would be contributed to a new affiliated, nonprofit corporation, the Rio Grande Railway Preservation Corporation, created specifically to operate the railroad. The Friends had also donated over \$62,000 toward the winter shop maintenance program. The Friends proposal for operation of the railroad was delivered to the commission before its February 16 meeting.

The Cumbres & Toltec Scenic Railroad Commission awarded the contract to the new corporation at its March 1 meeting. ☞

## LETTERS

### CHAMA—1939

I knew when I sent you my 1946 photo of the D&RGW Chama "engine terminal" [vol. 12, no. 2, Summer, p. 10] I should have looked longer. And then I found this—a really nice view of the old roundhouse and turntable in July 1939—taken by an old California friend, Richard B. Jackson. Dick was still a Coloradan back in the thirties, and he took a number of excellent views of both the D&RGW and the C&S ng's.

Except for the 475, there is nothing to obstruct the view of the roundhouse. Although all stalls have tracks, the four on the left look pretty delapidated and may have been used for storage, as were the next three after the east four were removed.

*Cornelius W. Hauck  
Cincinnati, OH*

### June Special Rescheduled

The Friends Annual Freight Special on June 24, 2000, listed in the Schedule of Friends Events on the back page of the winter 1999 issue has been rescheduled to October 21.

### Corrections

The volunteer roster on page 9 of the fall 1999 issue lists David Hoyt, session A at the Osier section house, as being a volunteer for five or more years. Actually, this was David's eleventh year as a volunteer. Although he did not attend this past summer, David's son, Dean, is a five-year volunteer. And we overlooked including Peter Eggink as a volunteer in session B. He was on the Cumbres section house team.

### FUND WATCH

Our two memorial funds have received the following donations as of April 1, 2000.

The Mike Hipskind Fund, established for exhibits and interpretive activities, has received \$3,900.

The Ralph Flowers Fund, established for locomotive rehabilitation, has received \$86,400.

### Association of Railway Museums (ARM)

Individuals can become affiliate members of ARM for \$15.00 per year. Contact ARM, P.O. Box 370, Tujunga, CA 91403. Members receive *Railway Museum Quarterly*, the journal of the association. ARM is a Professional Affiliate Member of the American Association of Museums.

1961



*View of the old Chama roundhouse and turntable in July 1939. (Photo by Richard B. Jackson.)*

## 2000 Schedule of Friends Events

May 15–19, Monday–Friday  
May 22–26, Monday–Friday  
Pre-Season Volunteer Work Sessions

May 27, Saturday  
Opening Day

June 19–23, Monday–Friday  
Volunteer Work Session A

June 23, Friday  
Annual Meeting

June 26–30, Monday–Friday  
Volunteer Work Session B

July 15, Saturday  
Twelfth Annual Moonlight Train

August 7–11, Monday–Friday  
Volunteer Work Session C

August 14–18, Monday–Friday  
Volunteer Work Session D

October 21, Saturday  
Friends Annual Freight Special



*Thanks to the efforts of Friends Phil McDonald, Jerry Sahnd, Gerald Blea, Roger Briggs, and Mark Yates, freshly painted locomotive 497 sits in the Chama enginehouse awaiting the installation of the drivers—two sets are in the foreground. The team spray painted the locomotive in the Chama enginehouse on February 26, 2000. (Photo by Tom Cardin.)*



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

5732 Osuna Road NE  
Albuquerque, New Mexico 87109

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