



# C&TS Dispatch

Vol. 8 No. 2

Summer 1995

## Goin' Home!

# The History of 463

by Art Nichols

*In the last issue Earl Knoob's article presented the history of 463. The photo spread in this issue highlights the events of February and March 1972 in California and Colorado, when the historic K-27 engine was brought back to the narrow gauge. I thank Joe C. "Swede" Johnson for making available documents, newspaper articles, and photographs; Tom Klinger and Keith S. Shostrom for permission to use photographs from their collections; and Leo Schmitz for help in locating records and collecting information.*

In the early 1950s, engines 463 and 464 were the only remaining K-27s from the original set of fifteen engines ordered by the Denver & Rio Grande at the beginning of the twentieth century. In 1954, engine 463 was set aside for scrapping, and 464 was the yard switcher in Durango, Colorado (eventually, 464 was sold to Knott's Berry Farm and then to the Huckleberry Railroad). 463 was hauled dead in a freight train from Durango to Alamosa in the fall of 1954 and was scheduled to be cut up, but it missed the appointment with the scrapper because in 1955 Gene Autry purchased the engine for his Melody Ranch in Newhall, north of Los Angeles. The development of the ranch ended, however, when a major brush fire in August 1962 destroyed much of the movie set.

Although the engine was not damaged in the fire, for nine years the historic K-27 was parked in Placerita Canyon, exposed to the elements and slowly deteriorating. In November 1971 Autry donated

*Engine 463 emerging from the tunnel at the north end of the San Fernando Valley on March 7, 1972, on its way from Saugus to the Southern Pacific freight yards in Los Angeles to be weighed before shipment to Colorado. Photograph by Kenneth Gosting, The Signal, Newhall, California, March 8, 1972. Joe C. Johnson Collection.*

463 to the town of Antonito, Colorado, and in March 1972 after much time, effort, and worry by the dedicated persons involved in its acquisition and transfer from California to Colorado, the town of Antonito welcomed back a little engine with a big heart.

The photographs and documents presented here are intended to give the reader a glimpse of the events and excitement involved with the return of 463 to the narrow gauge. Many people were part of the successful effort to bring 463 back to Colorado. The story of how they did it needs to be told and recognition given to all those involved in the effort, but that will be for a future issue of the C&TS Dispatch.

See *History of 463*, Page 7



We rely on contributions from our readers to publish the C&TS Dispatch. We can always use news about members' efforts to bring our historic preservation work to the attention of railfans, modelers, and the general public; articles and suggestions for articles about the railroad and its operation, history, and people; reviews of books and videos; artwork pertinent to the C&TS; and of course photographs. Our file of photographs is not as thick as it once was, and contributions would be greatly appreciated. We could use prints or

slides, color or black and white, with many different subjects: Friends volunteers at work; trains along the line; structures and rolling stock before, during, and after restoration and preservation by volunteers; and photos taken at specific events, for example, opening day. Photographs from D&RGW days are very welcome. So unpack that box of photos that you have been intending to do something about, and let us know what you have.

— the editor

## C&TS Dispatch

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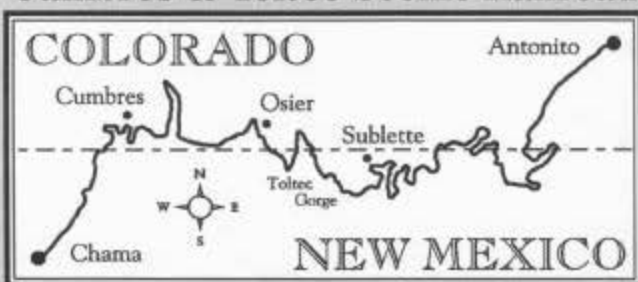
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The C&TS Dispatch is published by the Friends of the Cumbres & Toltec Scenic Railroad, Inc., 5732 Osuna Road NE, Albuquerque, NM 87109. The Friends of the Cumbres & Toltec Scenic Railroad, Inc., is a New Mexico nonprofit corporation.

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 Kyle Railways, Inc. As the museum support group, the Friends is dedicated to the preservation and interpretation of the railroad. Volunteers from the Friends have been especially active in restoring and preserving equipment and structures along the line.

Family membership in the Friends is \$20.00 per year; outside the USA membership is \$30.00. All contributions are fully tax deductible and will be gratefully accepted. Please write us in Albuquerque or call us at (505) 880-1311 for information about the Friends. The Cumbres & Toltec Scenic Railroad is both a National and a State Registered Historic Site.

## Cumbres & Toltec Scenic Railroad



Denver & Rio Grande Railway — 1880 to 1886  
Denver & Rio Grande Railroad — 1886 to 1921  
Denver & Rio Grande Western Railroad — 1921 to 1970  
Cumbres & Toltec Scenic Railroad — 1970 to 1995

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## The Windy Point

As summer begins, I am very excited about a number of things going on in our organization. I am also pleased to report that with the use of men and machines, the Cumbres & Toltec Scenic Railroad has been opened for another season. This year more than sixty thousand people will enjoy the ride and see a true vision of living history. We can certainly be proud of the fact that the work we do greatly enhances the experiences of these visitors to the railroad.

Our spring Board of Directors meeting in Colorado Springs was one of the best board meetings I have ever attended. You know that our board works very hard to get through all of the business that must be taken care of since we only meet in person three or four times per year. The board approved our final budget for 1995 and our financial condition is excellent, enabling us to move forward with many important projects. I am also pleased that Art Nichols, long-time editor of the *C&TS Dispatch*, has been elected by the board to fill a vacancy. Art's dedication to our organization has long been apparent and I'm pleased to have him on the board.

At this March meeting, the board also took two important actions for the future. First, an action that will pay dividends beginning this summer is to continue our major work in Antonito, enabling us to do car repair work there. You know that we installed a spur/repair track last year. The board has voted to install electrical service in the old building called Fort Knox and to buy a major saw (requiring specialized electrical service) that will improve and speed up our restoration work. The additional work that will be done inside Fort Knox this summer will make Antonito a great place for the restoration of wooden freight cars that can be done during the volunteer work sessions.

The second action of the board that I believe will pay real dividends in the long run is to aggressively pursue with the C&TS Railroad Commission and the operator a site in Chama upon which the Friends can build a new car repair facility, enabling interior car repair work to be done. While this is a long-range project, we have begun the search for land that will enable us to develop a specific plan that it is hoped potential donors to this new repair facility will find quite attractive. To allow year-round work with a place for specialized tools and equipment is very exciting and I think excellent news for our future restoration activities.

Finally, I am pleased to report that the response for volunteers to work this summer has been outstanding, and I do hope to see you on one of our special trains this summer.

Best wishes.

— BILL LOCK


ON THE

**C&TS** - THERE ARE ALL THESE GREAT SIGHTS -

DON'T MISS ANY OF THEM -



- USE PROPER EYE PROTECTION FOR YOUR WORK!


© 1995

## Freight Train to Toltec

Last year our Railfan Photo Excursion went to Osier, where it turned around and came back to Chama. This year our Railfan trip will go all the way to Big Horn before it returns to Chama. There will be many opportunities this year to photograph the train, just as there were last year. Tickets are still available for the Saturday, July 29, excursion, which is scheduled the day after the Friends Annual Meeting and between the two volunteer work sessions. The train will be composed of many freight cars that our volunteers have restored over the years. Passengers will ride in converted boxcars and a rider gondola. Tickets may be ordered by calling the Friends at (505) 880-1311. Saturday the 29th should be an exciting day on the C&TS!



*ABOVE: On June 11, 1994, the Friends sponsored a special Railfan Photo Excursion, shown here eastbound at Tanglefoot Curve. The consist included the six narrow-frame tank cars that the Friends acquired and brought back to their original home in 1992. This year the Friends will sponsor a railfan photo excursion from Chama to Big Horn and return. This Freight Train to Toltec will be on Saturday, July 29 (see above). Photograph by Richard Caldwell.*



*RIGHT: Your contributions at work! Lumber purchased with members' contributions is stacked in a Chama lumberyard ready for rolling stock rebuilding projects during this summer's volunteer work sessions. May 1995. Photograph by Ralph G. Flowers.*

# Why We Measure Buildings

by Keith Hayes — A.I.A.

*Keith is a member of the Friends and a licensed architect practicing in Denver, Colorado. He has a Master of Architecture degree from the University of Washington, Seattle, and has taught at the University of Colorado in Boulder. He measured buildings at Chama and Cumbres during the 1993 and 1994 volunteer work sessions.*

If you have attended the summer work sessions during the past two years, you may have seen folks running about buildings along the C&TS with pads of paper and tape measures. These people are measuring the buildings, the first step in any preservation or restoration project. Before actual repair or construction proceeds, it is important to thoroughly document the existing condition of the structure or rail car.

There are several components to this documentation: photographs, measured drawings, and in some instances material and paint samples. The Friends has assembled some very skilled teams to do this work. Two or three volunteers carefully measure and sketch all parts of the project, creating fully dimensioned sketches which can be used to create final drawings. Another volunteer documents the project with a camera, making sure to take photographs from all angles. In both cases, it is important to draw and photograph everything, from the whole rail car down to the door knob or coat hook.

The key to accurate and complete drawings is careful work in the field. Through years of experience, I can attest that one always forgets to measure or photograph something, and then has to return to the site to do the work: this is a fact of life. One way to avoid this is to place an object in a photo for scale. Last summer, Tim Bain and I made story poles — measuring sticks for the photographers to place in the photos for scale. Often, photographers have used tape measures or rulers, but the markings do not show clearly in the photographs, as you can see in Fig. 1. Even in bright sunlight and at close range, none of the markings are apparent! In Fig. 2, Joyce Shostrom is modeling one of the story poles at the Osier depot. The pole is four feet tall, with paint divisions indicating increments of feet and inches. Even from some distance, the pole can be clearly seen — a great aide at the drawing table.

During the winter, these sketches and

photos are used to create measured, final drawings which can then be used to plan the next summer's work. Because the drawings are to scale, they can be used to derive material quantities, and marked to show the full extent of the work to be done. The drawings may be included in reports to the State His-

toric Preservation Officers and in grant applications seeking funding for the work.

So, this summer when you see volunteers measuring and photographing buildings and rolling stock, they're not out to build a model. They are starting the preservation process!

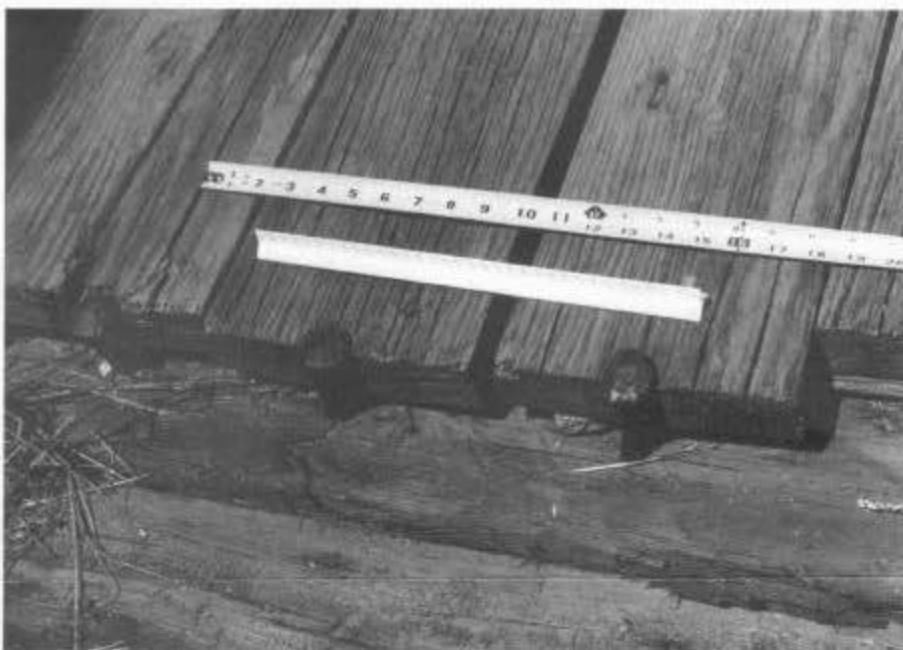


Fig. 1. An architect's scale and tape measure up close and in bright light. Photograph by Robert E. Hayes.

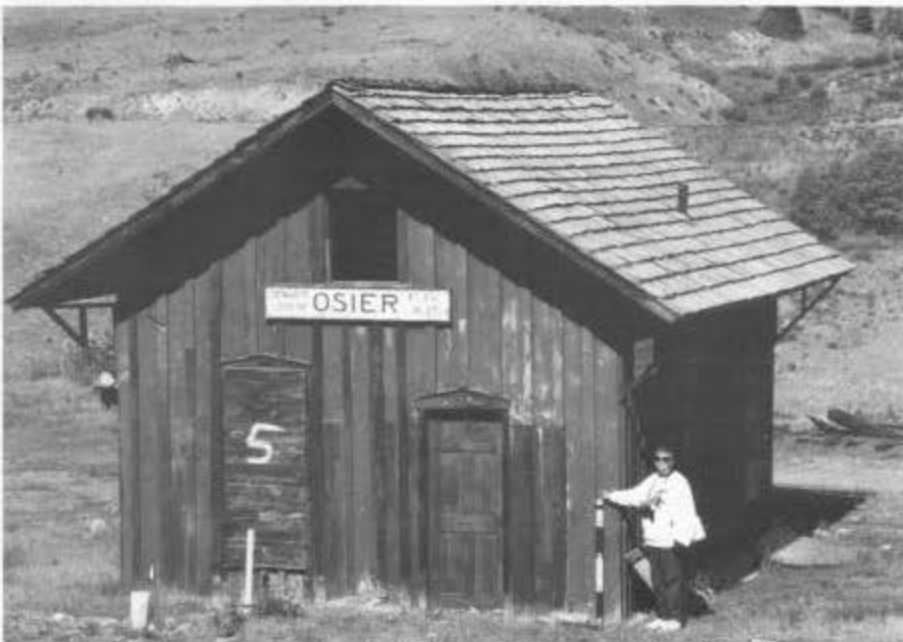


Fig. 2. Joyce Shostrom demonstrates a story pole adjacent to the Osier depot in 1994. Photograph by Keith Shostrom.

# 1994-1995 Winter Shop Work

by Earl Knoob

*This annual review of locomotive maintenance and repair usually appears in the first issue of the year, and several of our readers reminded us of that. Because of space limitations, we couldn't include it in the Spring issue. We will try very hard not to let this happen again.*

## No. 463 (K-27)

After an impressive first season in service, engine 463 wintered in the old roundhouse in Chama. Only minor repairs as well as annual inspections were needed.

## No. 484 (K-36)

Engine 484 also only needed minor work, including new rod bushings, some firebox repairs, and the regular annual work. It is truly one of the most reliable steam engines ever built!

## No. 487 (K-36)

This engine never got into service last summer. It is under flue extension, but because it was not operated after the inspection last winter, 487 does not need to be inspected again until next winter. The engine has been completely reassembled. In the past, 487 had a nagging running gear problem which made the drive wheel bearings run hot. It was discovered that one of the driver counterweights was pressed on out of quarter with the rest of the engine when a new axle was installed over in Durango. This was repaired by the Durango & Silverton. Along with other engines, 487 had its crossheads rereamed so that the crosshead main rod pin will stay in tighter. The engine is back in service.

## No. 488 (K-36)

Engine 488 was one of the major projects this past winter. Its running gear was dismantled and the drive wheels were sent to the D&SNG to have the tires turned, have one new axle made, and have the crossheads rereamed. 488 was also under flue extension and in November the smokebox front was opened and the draft appliances removed, along with two flues from the bottom of the boiler. The boiler was inspected in late November and passed a one-year extension. Additionally, 488 will get new drive rod and valve gear

bushings, along with some badly needed sheet metal and wood work in the cab. Because of the amount of work needed on 488, it probably won't be running until sometime this summer.

## No. 489 (K-36)

This engine is also under flue extension. Like 488 it had its smokebox opened up after the season and the draft appliances removed, along with two flues for inspection. 489 passed the inspection. The engine developed a running gear problem which resulted in rapid wear of the no. 1 side rod bushings; after a little over one season in service, the bushings were completely worn out. The nos. 1 and 2 drivers were removed and sent to the Durango & Silverton for examination, and it was found that the no. 2 pair was slightly out of quarter. The drivers were repaired and 489 was reassembled. The engine also received some valve gear bushing and crosshead rereaming work this past winter.

## No. 497 (K-37)

This engine has been a major project. After the season, the 497's pistons, valves, valve gear, crossheads, and guides were removed



*497 parked outside the old roundhouse at Chama. The engine will be reflued and the front and rear tube sheets will be replaced. May 11, 1995. Photograph by Art Nichols.*

so that the valves and cylinders could be bored. 497 had been getting pretty "wheezy," and after inspecting the piston and valve rings, we could see why. The boring job was completed just before the end of the year. The engine is also being reflued. The old flues were removed and inspection of the front and rear tube sheets showed that they too needed replacement. The front sheet will be cut out, leaving the knuckle

bend and seam where the sheet is riveted to the boiler shell. A new sheet will be constructed and welded in place. The rear sheet will be cut out, leaving the side knuckles, and a new upper knuckle to the crown sheet will be made. The new sheet will be formed



*Drivers for 488 ready for unloading in the Chama yard after returning from Durango, where the tires were turned. May 11, 1995. Photograph by Art Nichols.*

and welded into the existing side knuckles, while the new upper knuckle will be riveted into place. The new tubes are on hand.

## Other Projects

Diesel engine 19 suffered a burned up traction motor in spring 1994 while plowing snow out of Antonito. A new traction motor has been installed. This traction motor change has resulted in the completion of the Antonito drop pit (only a twenty-year project). Because of the size and shape of the traction motor wheelset assembly, the Chama drop pit could not be used. Diesel engine 15 spent the winter in Chama as the shop switcher.

At the end of the 1994 season, the entire Chama train consist was deadheaded to Antonito for general repairs and running gear work. The lack of shop space in Chama as well as better weather conditions in Antonito made the move quite practical. In order to make room in the Antonito yard and to plan for the ever present "what if ..." situation, the Antonito consist was deadheaded over to Chama for the winter. The consists were swapped before the 1995 season opened.

*Earl Knoob is Safety and Compliance Officer/Superintendent of Operations of the Cumbres & Toltec Scenic Railroad and a consulting director of the Friends.*

## DIRECTOR'S VIEWPOINT

by Warren Ringer — Woodland Hills, California

*Warren was elected to the Board of Directors in 1993. He came to the Friends as a modeler with a lifelong interest in the Colorado narrow gauge and the D&RGW in particular. A visit to Chama in 1989, while attending the Narrow Gauge Convention in Durango, led to the discovery of the Friends brochure and membership in the Friends. Piqued by the thought of working on the real thing, he attended his first work session in 1990 and has been back every year since. Married with grown children, none of whom were ever bitten by the railroad bug in any form, he is retired from the UCLA Medical Center, where he worked as a manager in the Computing Services Department.*

What is the relevance of the Cumbres & Toltec Scenic Railroad to today's world? To you who are reading this viewpoint, the C&TS is certainly relevant. Your interest in steam railroading or narrow gauge or its unique blend that was the D&RGW and is now the C&TS ensures meaning for you. Your support has enabled an organization like the Friends to exist and to make such a significant contribution to preserving and maintaining this piece of a once viable and thriving transportation system. But in today's high-tech world, with its environmental concerns and the ever present focus on the bottom line, does the C&TS really belong? Is it just an expensive plaything for a small group of dedicated and nostalgic fans, remembering that "fan" is short for "fanatic"? What general appeal does it have?

The C&TS, or more correctly its original incarnation as the D&RG, was created in an age when the steam-powered railroad was the very latest in modern transportation systems. Narrow gauge was a unique adaptation that really only found limited favor for a couple of decades and even then only in certain situations. The need to standardize for purposes of interchange ensured that narrow gauge railroads would not become very common carriers. Their founding occurred in an age when there were no automobiles or buses or trucks, let alone airplanes, with which to compete. Its competition came from animal power dragging wagons or coaches over barely passable tracks. Even as those animals and the teamsters who drove them were no match for the steam engine then, the steam engine today is no match for the internal combustion engine whether on the highways or the rails of today's railroads. So as a transportation system, the C&TS is no longer relevant to today's world.

However, the railroad is relevant to the local economy. As a tourist attraction, it brings thousands of people to the area each year and those tourists need to be lodged, fed, and entertained while not riding the C&TS. Local business people provide these services and so the railroad contributes to their livelihood. This relevancy is crucial to the C&TS. It provided the rationale for the acquisition of the property from the D&RGW by the states of Colorado and New Mexico, as well as for their continued support.

But does the railroad have a relevancy to the general public? These are the tourists that ride it every year and by their ridership ensure the continued existence of the C&TS as a live and going concern. Some of the tourists are railfans and it is wonderfully relevant to them. But what about the other, non-railfan, tourists who ride the train, and even those who just stop and look as they are passing through? Does it have meaning for them? I like to think so. For the C&TS is also a museum.

Museums are wonderful — they preserve, display, and interpret the artifacts and ways of life long gone. They come in all sizes, from giants like the Smithsonian to little local historical groups, and they cover every aspect of human existence. Their very number and va-



*Warren Ringer working in the Chama yard, July 1990.*

riety demonstrate the need that we humans have to be connected with our past. Most museums are somewhat sterile in the sense that they are static and rely on pictures, text, and mock-ups to deliver their message. Most are indoors, protected from the elements. You can go through them at your pace; however, a trip on the C&TS is done at its pace.

The narrow gauge is a unique, living museum in the truest sense of the word. It provides the sounds and smells and activity that only an operating museum can create, which means it also provides the frustrations and problems of a real thing. It does so outdoors under the elements, as any of you who have ridden in the open gondola through a rain shower or hail storm can attest. It uses the methods and materials that its original predecessor used. It suffers the same problems — mechanical breakdowns, track maintenance, and operational delays that have existed for over one hundred years. It provides a real experience of life as it was over a century ago, not just a representation.

To me, this is important. I work for the Friends to support the C&TS because I am a fan — I love the old narrow gauge. But I like to think that I'm also helping to make the past a little more real for all those who aren't railfans.

# History of 463

Continued from Page 1

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No. 265976- Filed for record at 3:30 o'clock P. M., January 22, 1972  
Reginaldo Gerain Jr.



*Gene Autry*  
3888 SUNSET BOULEVARD - LOS ANGELES - CALIFORNIA 90008

## BILL OF SALE

I, Gene Autry, of Los Angeles, California, in consideration of One Dollar (\$1.00) do on this the 26th day of November, 1971, hereby grant, sell and convey unto the town of Antonito, Colorado, all of my right, title and interest in-and-to one narrow-gauge steam locomotive #463.

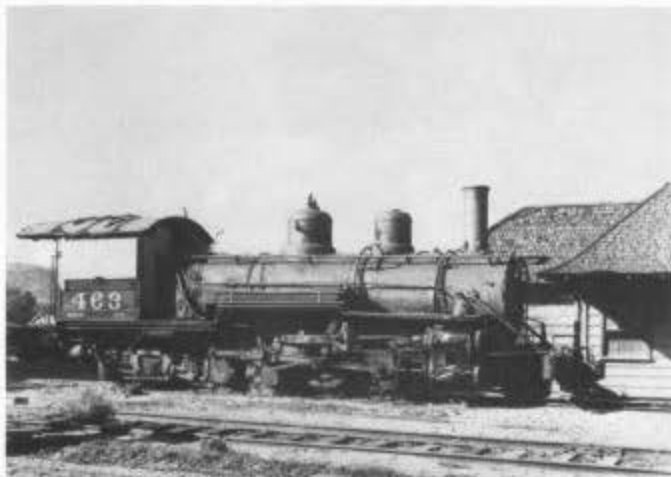
*Gene Autry*  
Gene Autry

Subscribed and sworn to before me on this the 26th day of November, 1971.

*Vivienne M. Kleen*  
Vivienne M. Kleen



United Press International quoted Hugh Fowler, a Colorado state senator and president of the Colorado Society for the Preservation of the Narrow Gauge: "Thank you, Mr. Autry, on behalf of thousands of rail fans who agree with you that 463 belongs on its own rails at Antonito. And a very Merry Christmas."



Engine 463 was parked at Gene Autry's Melody Ranch in late February 1972 when representatives of the C&TS, the Colorado Society for the Preservation of the Narrow Gauge, Inc. (later to add New Mexico to its title), and the Town Council of Antonito arrived to oversee the transfer of the locomotive to Colorado. The society and the town council, along with the citizens of Antonito and the San Luis Valley, were responsible for bringing back 463 to the narrow gauge line. Joe C. Johnson Collection.



On February 22, the loading began with the tender of 463 lifted from the tracks by two heavy duty cranes. Joe C. Johnson Collection.



The tender was lowered on to a flat bed truck that brought it to the Saugus, California, station. The tender weighed about 19 tons. February 22, 1972. Tom Klinger Collection.



The day after the engine and tender were loaded at Melody Ranch, they were moved to the Southern Pacific's Saugus station for reloading to flat cars. The engine was lowered on to a car that later was found to be insufficient for the engine's weight. Number 463 was then transferred to a heavier flat car at Saugus, but this transfer and repairs to the car later in the Los Angeles yards delayed 463's departure for Antonito by several weeks. February 23, 1972. Joe C. Johnson Collection.



After the tender had been loaded, the engine was prepared for lifting off the tracks. February 22, 1972. Tom Klinger Collection.



Engine 463 is shown here being lowered on to a second flat bed truck for transport to Saugus. The engine weighed about 66 tons. February 22, 1972. Tom Klinger Collection.



From Los Angeles 463 was shipped through Sacramento, Ogden, Salt Lake City, Grand Junction, Salida, and Pueblo. On March 18, the K-27 arrived in the Denver & Rio Grande Western yards at Alamosa. Shown here, the engine was lifted from the flat car to a flat bed truck, part of which is visible behind the engine. Photograph by Joe C. Johnson.



*In Alamosa 463 was lowered on to a flat bed truck for the journey to Antonito. Photograph by Joe C. Johnson.*



*The welcome-home ceremony on Saturday, March 25. From the left, Ernest Ornelas, Antonito Town Council; Phil Montoya, American Legion; Cirilo Martinez, Antonito Town Council; Patrick Vigil, mayor of Antonito; Eddie Vigil, mayor of Chama; Tony Jaramillo; Joe C. "Swede" Johnson, mayor pro tem of Antonito; and Walter Perea, American Legion. Joe C. Johnson Collection.*



*The engine and tender are shown here on their way from Alamosa to Antonito. Photograph by Joe C. Johnson.*



*At the welcome-home ceremony. Below 463's cab are, from the left, Harold Abeyta, American Legion; Charly Fowler, Colorado Society for the Preservation of the Narrow Gauge; Patrick Vigil; Joe C. "Swede" Johnson; and Walter Perea. Photograph by Bill Westenburg. Joe C. Johnson Collection.*



*In September 1974, two and one-half years after arriving home, 463 was photographed in the Antonito yards by Keith S. Shostrom.*

# The Little Engines That Could – Usually

by **Larry Calloway**  
— Albuquerque Journal

**W**e're on the road to Cumbres in Turner's 1983 4-by-4 diesel Chevy Suburban to see something Turner says isn't happening on this day anywhere else in the entire world.

And Turner — Carl Turner, vice chairman, former chairman and 12-year member of the two-state Cumbres and Toltec Railroad Commission — is telling about the day they first filled the new redwood water tank at the Chama yards.

"Some gal says, 'You paid \$100,000 for that? It leaks!' " Turner says, and he kicks the 197,000-mile Suburban into low range on a steep pitch, laughing. See, everybody knows a tank leaks until the water swells the wood staves.

Turner's a native-born Mississippi scrounger and retired Rural Electric Cooperative Association director who knows how things work, from authentic steam-railroad water tanks to New Mexico politics, to the business of running "America's longest and highest narrow gauge steam railroad," which opens the tourist season on May 27.

"Looks like they're up yonder," he says. And I see a heavy mass of dispersing particulates, sometimes called smoke, boiling over the spruce and the fir on the crest.

"I don't invite environmentalists up here," Turner says.

Rotary Club: The snow at Cumbres — 10,015-foot Cumbres Pass just north of the New Mexico-Colorado border — is about five feet deep with drifts twice as high. The "150 percent snowpack," as Turner calls it,

meaning spring floods waiting to happen, is up to the eaves at the yellow station.

The original sign on the station notes this place is 330 miles from Denver. In the early 1950s, before the highway, a freight train was stranded on Cumbres in a sudden snowstorm and the crew had to wait for days, surviving on air-dropped supplies.

Here and now, hissing and puffing like dragons in a ditch, are three fired-up steam locomotives coupled behind what Turner calls "The Rotary."

Now, the Rotary is something like I've never seen before, at least in working order. Cobbled together by the shop geniuses of the Denver and Rio Grande Western Railroad long ago, the plow resembles a cross between a wooden shack and an espresso machine. At the head end is a many-ton steel-bladed "fan" as high as two men.

When the Rotary is running, it augers through the snow and blows it away in a bright plume, leaving a slot as wide as a narrow-gauge train plus a few feet of clearance. But for the moment, the mighty Rotary is not running.

John Bush, who gives orders from time to time on a hand-held radio, tells me they're fixing the air compressor on the rotary plow. "It's about like normal," he says. "We've had some breakdowns. We always do."

Asked his title, John says, "I'm chief mechanical officer and assistant manager in charge of operations. Other than that, I hardly do anything."

John was educated as an anthropologist, but here on the Cumbres and Toltec, experience and the ability to think like a steam engine are more important than college.

"I smell wood smoke somewhere!" John barks on his radio, meaning that something might be on fire somewhere. The steam engines burn hand-shoveled coal.

Their tenders were filled that morning the modern way, by dump truck and front-end loader, but you can't be a purist about everything. Among the 100 or so hard-core railroad photographers that are at Cumbres to record the event are purists such as the one who is making furious hand signals at John to get the plow headlight turned on.

The snow is best ever, and Turner recalls there have been four-or five-year stretches when there wasn't enough snow to plow and photograph.

At long last, the plowing resumes. The steam engines suddenly go nuclear, it seems, sending black mushroom clouds several hundred feet straight up like that picture of Mount St. Helens erupting. The Rotary's blades become a blur. There is a roar representing more raw horsepower than a gang of jumbo jets, I think.

The plow hits the wall of snow on a siding track, and the snow explodes, arching a hundred feet with a force that bends tall timber. The photographers are going wild.

It is an awesome event that surely, just as Turner promised, isn't happening anywhere else in the world on this day. And then ... the plow breaks down again.

John isn't as philosophical as before. "Whenever this thing is running," he says, "it's attempting to self destruct!"

*Albuquerque Journal, May 14, 1995, Larry Calloway. Used with permission. Permission does not imply endorsement.*

## Opening the Railroad

by **Earl Knoob** — as told to Bill Lock

**O**pening the C&TS of snow accumulations from the 1994-1995 winter proved to be no easy task. Practically every kind of machine was used. Snowfall, especially late in the season, made this winter almost as great a burden as the winter of 1992-1993 (four days of plowing with the rotary were necessary to open the railroad in 1993).

In order to give the slide area of the railroad at the New Mexico-Colorado state line a chance to dry out, rotary snowplow OY

was dispatched on Monday, May 1, 1995, pushed by K-36 engines 487 and 489. Because of potential weight problems in the mud, two UTLX tank cars (with sturdy frames) were positioned between the rotary and the pushing engines. The train left at approximately 11:00 am and returned at approximately 2:30 pm, after going as far as Hamilton's Point, about half a mile beyond Cresco tank. Several work trains were run after this date in order to dump rock and ballast in the soft places along the track that were the result of thawing.

On Wednesday, May 10, with the regular

rotary water car positioned between the two engines and OY, the work train left Chama at 9:00 in the morning. The consist reached Coxo at approximately noon, where the crew, encountering very heavy and very thick snow, called for additional motive power. Engine 484 was dispatched from Chama to lend a hand. Being low on water, engine 489 had returned to Cresco tank, where it met 484. The two engines then went on to Coxo and joined 487. The three-engine train encountered drifts up to twelve feet at Windy Point and did not reach Cumbres until 9:00 that evening.

Thursday morning saw the work train clearing out the yard track, the west leg of the wye, and the sidings at Cumbres. Because of mechanical problems, 489 returned light to Chama. The yard was cleared by noon, and the work train left eastbound. Again, heavy snow was encountered, and it was almost 6:00 that evening before the Los Pinos loop was reached. At that time the axle between the pinion gear and the crank (the drive shaft) of OY fractured. The crew on the rotary immediately knew that there was a serious problem and that the snowplow was no longer operable. The entire work train returned to Chama, arriving there at 7:45 pm.

The railroad, however, was still not open, and several large drifts and stretches of snow pack remained. The following week, on Thursday, May 18, an additional work train with a pilot plow was dispatched from Chama. 484 was the lead engine, and it was followed by 487 running backwards from Chama to Cumbres. Even though the east leg of the wye had been plowed by a bulldozer several weeks earlier, more snow had

accumulated to the point that it wasn't passable. After reaching Cumbres, 487 was separated and was able to plow out the east leg; the engine then turned on the wye. This work train then proceeded eastward and reached Los Pinos siding at noon and was successful in plowing almost another one mile of snow-covered track. As it neared the Los Pinos phone booth (near MP 323), the train encountered very deep snow. After two hours of bucking snow, the engines removed only 500 of 1,500 feet of heavy snow. The crew was concerned that damage to the equipment might occur if they continued, so they stopped plowing and returned to Chama.

The next day, Friday, May 19, engine 489 with a pilot plow was dispatched from Chama with a Caterpillar tractor on a flat car. The Caterpillar was used to remove some of the remaining snow. The crew felt that additional drifts could be plowed with the engine; however, 489 ran into a large section of ice on the rail and the entire front of the engine was lifted off the track high enough that the spring rigging separated from the run-

ning gear. Fortunately, the Caterpillar tractor was handy and pushed the engine back on the track. The Caterpillar cleared the rest of the track as the shop crew reassembled the spring rigging on 489 at the Los Pinos siding. The train didn't get back to Chama until 9:00 that night.

With the large drifts now cleared, the railroad's track crew cleared the remaining drifts with a front-end loader. On Wednesday, May 24, the Antonito passenger train consist (which had wintered in Chama) was dispatched with a doubleheaded train, including 463 as the road engine and helper 487 with a pilot plow on the front. The pilot plow widened cuts that had been made by the front-end loader and cut through all the final drifts. On the following day, engine 487 brought the Chama cars (which had wintered in Antonito for repairs) back to Chama.

Opening day on the C&TS was Saturday, May 27, and it was a sell out, making all of the work worthwhile. Rotary snowplow OY will be repaired either this summer or fall so that it will again be ready to open the railroad when called upon.



*On May 18, after trying unsuccessfully to buck out a seven-foot drift at MP 323.2, the plow outfit (487 and 484) pauses for inspection before returning to Chama. A bulldozer was brought in the next day to clear the line. Note that 487's headlight was removed for plowing to avoid damage. Photograph by Earl Knoob.*



*On the morning of May 11, a front-end loader filled OY's tender and those of 484, 487, and 489 at the highway crossing at Cumbres. Photograph by Art Nichols.*



*Clearing the east leg of the Cumbres wye on May 18. Engine 487 is up to its eyeballs in snow. Photograph by Chris King.*



*OY approaching the highway crossing below Coxo on May 10. Photograph by Art Nichols.*

## THE MODELER'S COLUMN: NO. 2

by Ed "Boomer" Walton

*Ed Walton is a member of the Friends, and he and his wife, Lyn, have been volunteers at the summer work sessions for many years.*

By now everyone who is associated with the Friends of the Cumbres & Toltec Scenic Railroad should have received their Spring 1995 issue of the **C&TS Dispatch**, which contained the first installment of this column and the modeler's interest survey. I want to thank all of you who have responded to the survey thus far. I have enjoyed reading every survey that I have received. Your responses, ideas, and encouragement have been most gratifying. I have already begun to get "steamed up" with some ideas from your responses that I want to develop into future articles. Soon I should have a sufficient survey data base for reporting the results in a later column, so please folks, keep those surveys or letters coming!

For a moment let's go back in time. The year is 1981. The place is the Cumbres & Toltec Scenic Railroad. Two friends, William Lock and Glenden Casteel, make several visits to the C&TS and come away with a mutual vision and desire to help preserve the rolling stock and railroad associated structures not maintained by the operator of the fledgling railroad. From their vision, enthusiasm, and tireless efforts, the Friends of the Cumbres & Toltec Scenic Railroad was founded and has developed to its present status. What has occurred concerning the work of the Friends on the railroad I would like to see happen to a certain extent in model form through what I call "A Modeler's Vision of the C&TS."

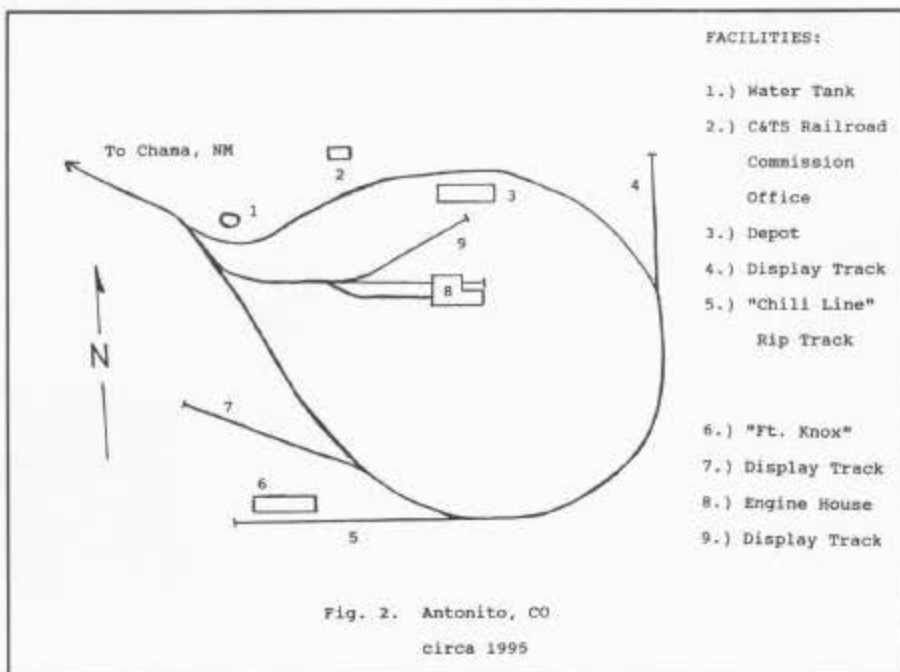
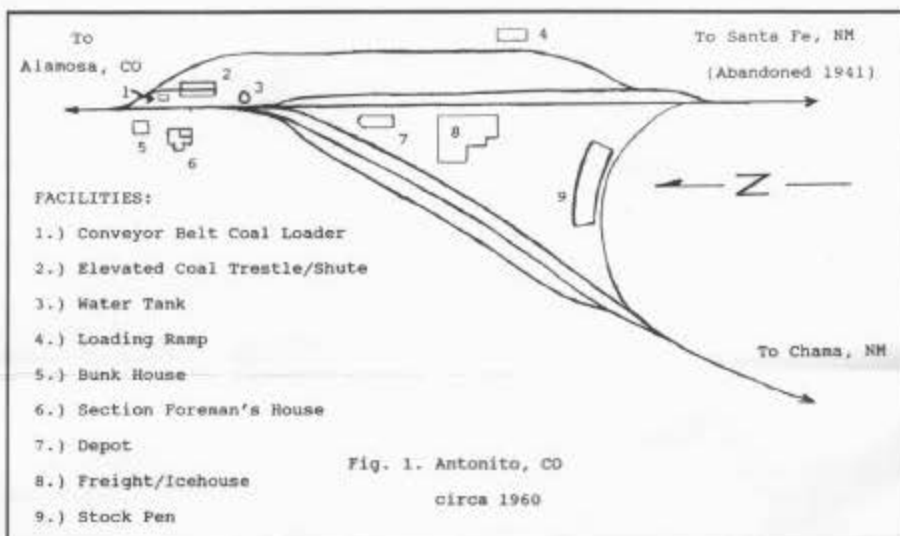
I will report various parts of this vision as time goes on, but to begin I would like to see significant parts of the C&TS modeled in transportable modular dioramas and possibly put on permanent display for general public viewing at important locations on the C&TS. These significant scenes of the C&TS would be enclosed and could be static displays or made operable manually or by coin. Each display would be of sufficient size so as to capture the flavor of each facility accurately and conveniently for the public's enjoyment and education.

The first facility that I would like to see illustrated by models is the Antonito, Colorado, terminus. This facility lends itself to two displays that would reveal its rich heritage using a "then" and "now" theme. Before the Chili Line was abandoned in 1941, passenger trains to Alamosa or Durango were held for the passenger train to or from Santa Fe before proceeding either west or north. Antonito was one of the last towns to have three-rail service, and the Y trackage is a work of art. Antonito also had an elevated coal trestle/shute, a ground level coal-loading conveyor, a water tank that is now at Lava, and the original D&RG station built in

1880, refurbished in 1917 and still standing on what is now the Southern Pacific. There were also a combination freight and ice house, a bunk house, a section foreman's house, a warehouse complex, stock pens, and a loading/unloading ramp (see Fig. 1).

The "now" display would consist of the balloon track that encompasses the main depot, the display track between the main depot and the engine house, and the engine house. Outside the loop would be the water tank, the first C&TS depot, now used as the C&TS Railroad Commission office, the display track on the east side of the property, the "Chili Line" rip track, "Ft. Knox," and the display track on the southwest side of the property. All display tracks would contain models depicting what is being displayed on the prototypes (see Fig. 2). In addition, roads and parking lots could be included.

Is anybody game for it? Let me know what you think. Until next time, keep in mind that for some people ... 3' > 4' 8 1/2".



## COMMISSION REPORT

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

**MARCH 25, 1995, ALAMOSA, COLORADO.** General Manager Joe Vigil reported that the outlook for the 1995 season is very encouraging. The railroad has been receiving calls, inquiries, and reservations. As in 1994, the advertising budget for this year will be \$150,000. There will be marketing efforts in Taos, New Mexico, in order to draw tourists to the Antonito ride.

Earl Knoob explained how Certified Brochure Distribution will handle the distribution of approximately 265,000 of the 450,000 brochures that have been ordered. The coverage area will be from Denver to El Paso along the I-25 corridor and from west Texas to Arizona as well as in the Four Corners area. The distribution will begin in April and run through October. The railroad will also distribute brochures to welcome centers and will send them to travel agents and AAA centers. Something new will be the inclusion of the railroad in two Internet programs. One is an international tourist information program and the other is a railroad-buff oriented program.

John Bush reported that safety valves for locomotives are no longer available. The railroad will either have to start building pieces for the valves or find someone who will. John is working with other major steam railroads in an effort to get each one to specialize in producing specific items so that a supply of critical items will always be available.

Leo Schmitz presented the track rehabilitation study, which was prepared by Kyle Railways at the request of the Commission. On March 23 a call was received from Congressman Bill Richardson's office requesting a copy of the report, which had not been finalized yet. By quick use of the fax machine and phone calls, final corrections were made and a copy faxed to the congressman. The report will be used by the Commission in its search for funds to upgrade the track. Commissioner Carl Turner stated that the Commission's vision is to do the work over a five- or six-year period utilizing local labor.

Ralph Flowers presented the list of proposed Friends projects for 1995. The commissioners unanimously approved the projects and directed Leo Schmitz to proceed with negotiating an agreement among the Friends, Kyle Railways, and the Commission. Requests made by the Friends for a possible site on railroad property on which the Friends might build a car repair facility and permission to take cars off the premises for repair were both referred to the executive director for further study. Both items will be placed on the agenda of the Commission's next meeting to hear input from the public. The long-term plan for structure and car restoration and rehabilitation was also discussed by the Commission. The executive director commended the Friends for its thoughtful approach to this issue, and the Commission directed that the issue be studied further. The commissioners agreed to consider a joint meeting between the Friends and the Commission on this issue.

*Cumbres & Toltec Scenic Railroad Commission: Wayne Quinlan (Colorado), Chair; Carl Turner (New Mexico), Vice Chair; Lewis Entz (Colorado), Secretary; and Spencer Wilson (New Mexico), Treasurer.*

## BOOK REVIEW

**A History of the American Locomotive: Its Development 1830-1880** — by John H. White, Jr., Dover Publications, Inc., New York, paperback, reprint 1979 (ISBN 0-486-23818-0).

I was first attracted to this book by the dates "1830-1880," but as I looked through the book it became obvious that there is more information about 1830-1880 locomotives than just pretty pictures and drawings. The book is divided into three parts: Part I is the "Era of Fundamental Locomotive Design," Part II is "Components," and Part III is "Representative American Locomotives."

One of the topics in the first part is materials, such as wood, copper, brass, cast iron, wrought iron, and steel, why you would use the material, and where on the locomotive the material would most likely be used. There is also a section on wheel arrangements, which is followed by a section on performance. The combination of these two sections gives the reader a good understanding of why different locomotives were popular.

As an electrical and computer engineer with an interest in mechanical engineering, I was most interested in Part II. All of the major and most of the minor components that go into a steam locomotive are discussed. I spent the most time going between figures in the valve gear section; cutoffs and valve gears are covered in great detail. Tenders are also covered. One may think that this is a trivial part of motive power, but consider that the tender was carrying 1,000 to 2,000 gallons of water and about 2 1/2 cords of wood. This meant that the tender truck suspension was required to operate smoothly between a full load of possibly 20 tons and the weight of an empty tender.

In Part III, White reviews twenty-four specific locomotives, starting with the Stourbridge Lion, 1829, and the John Bull, 1831. He ends with the Baldwin Ten Wheeler of 1870. I particularly liked the photos and drawings of the Rogers locomotives, an 1863 mogul and the classic 4-4-0, 1865.

The book contains many photographs and lithographs. About one-half of the 234 figures are copies of builders' prints. Most of the prints have a great deal of detail, for example, Figs. 198, 198A, and 198B detailing the 4-4-0 Southport, 1857, one of the many six-foot broad gauge locomotives covered in the book.

Most prominent in the Appendices are specifications for several different locomotives. Appendix F gives the number of parts and the weight of each part required to make a Hinkley 4-4-0, 1865.

There is one problem I did have with the book. All references are by figure number. Because of this, I was constantly looking at the "List of Illustrations" index for the page number. I finally copied this section and highlighted the page numbers.

I found the book very informative from an engineering and historic point of view, I would recommend the book to anyone interested in how a locomotive is made or works. (Note: Do not confuse this work with White's other book, *Early American Locomotives with 147 Engravings*. The engravings and their brief captions are very informative, but the book is meant to be a pictorial collection, not a discussion about locomotives.) — *Jim Gross*

### ROTARY SNOWPLOWS ON THE CUMBRES & TOLTEC SCENIC RAILROAD

Joseph P. Hereford, Jr.

Published by Windy Point Press. Copies may be ordered for \$14.95, plus \$2.50 for shipping. Make checks payable to Windy Point Press and mail to:

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## NARROW GAUGE NEAR AND FAR: NO. 2

by Earl Knoob

*This column is intended as a clearing house for information on the various narrow gauge (and a few wide gauge ones, too) operations around the country. If any of our readers has information on narrow gauge operations of interest, please forward it to ye olde editor in Los Alamos or to me in Chama. Likewise, if for some unearthly reason, I happen to publish misinformation, feel free to correct me.*

One of the so far unsung projects on the Cumbres & Toltec Scenic Railroad has been the reconstruction of the Chama water tank. The tank was rebuilt during the winter and was returned to service in early May. The result is superb. It looks like a full-scale version of the Timberline Scale Models one that I built in HO<sub>n3</sub> back in the 1970s. I think mine had a better weathering job on it though. [An article on the reconstruction of the Chama water tank will appear in a future issue — the editor.]

There was a nice article on Knott's Berry Farm's railroad in the May 1995 issue of *Railfan & Railroad* magazine, including great photos of no. 340. Good show, guys. In the July issue they even printed a letter by yours truly applauding their efforts.

Good news from the East Broad Top. I received a letter from member Joel Salamon in Allentown, Pennsylvania, that the EBT will run again on weekends this summer. The owners have given it a stay of execution and the Friends of the EBT and other area historical groups are trying to raise money to defray operating expenses by selling special commemorative tickets. The EBT is one of our nation's railroad treasures and, in terms of significance, is right up there with our beloved C&TS. It must be saved! For more information, contact EBT Development Fund, c/o Huntington County Heritage Committee, P.O. Box 374, Huntington, PA 16652 (814) 643-8193.

I also heard from New Mexico member Mike Duggan, who is temporarily in exile in New Hampshire. He reports that the group who purchased some of the two-foot gauge equipment from Edaville a couple of years back has about one-half mile of track laid on the waterfront in Portland, Maine, with another three-fourths mile in the planning stage. They are operating an ex-Monson RR 0-4-2 on weekends this summer.

My spring vacation this year was sadly devoid of much narrow gauge exploration. I managed to visit the Nevada Northern in Ely and get a look in their shop. Inside was ten-wheeler no. 40 getting a boiler inspection along with 2-8-0 no. 93, which was going to run the next weekend for a special. Despite being "wide gauge," the NN is rated very highly as one of the most complete and intact railroad facilities in the nation, and every railfan in the country should make it a point to stop there. I had the privilege of helping the NN folks get started back in 1987, and had the honor of running no. 40 on its maiden voyage as a tourist hauler. It is interesting to note that inside the NN's huge enginehouse (which could hold over twenty — yes, twenty — little 0-6-2T mining engines) is a large potbelly stove whose door has the initials "D&RG RY, 1882" cast into it. It is identical to the ones that keep the machine shop in Chama warm during the winter.

Also while on vacation, I visited the California Western RR at Ft. Bragg on the north coast. The CW is a regular standard gauge freight road that offers daily passenger service. The summer trips use diesel power as well as steam in the form of 2-8-2 no. 45, a trim little 70-ton Mikado. The off-season trips use rail buses called Skunk Cars. I like the rail buses. We rode in the M-300, which is a neat looking shovel-nose beast built by American Car & Foundry in the

late 1930s. If you ride, try to get the front seat next to the engineer for a cab-ride-type view of the railroad. The line winds forty miles from Ft. Bragg on the coast over to Willits, through some of the most beautiful redwood scenery there is and around curves that make even this old narrow gauge hillbilly sit up and take notice. Clearly, the CW is one of the best train rides in California. The CW is also run by Kyle Railways.

While out west I also got a short look at the Napa wine train. While it is standard gauge and diesel powered, its gourmet dining car makes it undoubtedly the best smelling passenger operation I have ever encountered.

When Friends members make their annual trek to Chama for the summer work sessions, be sure to stop at the Galloping Goose Historical Society's museum in Dolores, fifty-five miles northwest of Durango. They have a beautiful replica of the Rio Grande Southern depot that used to stand in Dolores and are working to restore Galloping Goose no. 5 to operation. Someday they hope to lay track for operation (how about all the way to Mancos).

For the rail historian, there is much to see in the Dolores area. Along with the RGS remains, there were several logging operations with their own railroads. One of my favorites is the New Mexico Lumber Company, which operated close to forty miles of logging line north of Dolores. They had the largest logging railroad in Colorado. Motive power consisted of old D&RG engines (including C-19 no. 349), a pair of Lima 2-8-0s, and a 60-ton, 3 truck Shay that still exists at a museum in Indiana. The line operated only a few years from 1926 until the Depression closed them down in 1932, but there are miles of grades to be driven and hiked north of Dolores. There are lots of goodies to be found also, spikes and rail joint bars for 40-pound rail, in addition to miles of old ties left behind. One could spend a solid week up there and not cover all the various spurs that they laid to load logs. It is a very pretty area that is not on the beaten path.

I'd like to thank all of you who have said nice things about the 463 article in the last issue. It is hoped that we can print more articles about the history of D&RGW narrow gauge power in future issues.

I'll close this column on a very sad note. In March 1995 we lost one of our southern California members. Bob Reed (shown in the lower left-hand corner of the photograph on page twelve of this year's Spring issue) passed away at his home in San Marino, California. Bob wasn't a very active member, but his love of all things related to railroading led him to join the Friends. Bob was a close friend of my family, and he got my father interested in railroading when they were roommates at Pomona College in Claremont, California, many years ago. If it hadn't been for my father's association with Bob, my interest in railroading would probably never have happened. Thanks Bob, we'll miss you.

**(505) 880-1311**

The Friends of the Cumbres & Toltec Scenic Railroad has a new telephone number. Voice mail has also been installed. Call 24 hours a day for Friends information or to leave a message.

## LETTERS

Send your letters to the editor at 1307 45th Street, Los Alamos, NM 87544.



Exterior view of the Shenzhen, China, train station.



Seen on the train returning to Hong Kong from Guangzhou (Canton).

### MORE PHOTOS FROM CHINA

In the last issue we intended to print three photographs from China that Carl and Tina Tebbens sent to us, but we were able to print only one. Here we present the other two photos. Carl and Tina have been living in Kuala Lumpur, Malaysia, since the middle of 1994, and these photos were taken on a trip to China last August.

### CONRAIL

On behalf of Conrail, Inc., I am pleased to inform you of a special Conrail employee-recognition program called "Dollars for Dopers." This Conrail program rewards and supports the volunteer efforts of Conrail employees through the granting of a contribu-

tion to qualified non-profit organizations in conjunction with their services.

In this regard, attached please find a corporate contribution ... in recognition of the volunteer services performed by D. Biggs in 1994.

Elizabeth A. Maggio  
Manager, Contributions & Corporate Affairs  
Philadelphia, PA

Volunteer Donald Biggs and his wife, Rhonda, came to the railroad as 1994 volunteers. Donald's company supported his work by contributing to the Friends. Many other companies have corporate matching programs where the corporation will match or sometimes double members' charitable contributions to the work of the Friends. If your company has a similar program, please let us know.

### CORRECTION

Your newsletter claims the original Denver & Rio Grande Railway lasted until 1921 when it was replaced by the Denver & Rio Grande Western Railroad.

Not so. The original Denver & Rio Grande Railway went into bankruptcy during the mid-1880s, and it was terminated and a new company took over in 1886, the Denver & Rio Grande Railroad. It was this latter firm that lasted until 1921 when, in turn, a new company, the Denver & Rio Grande Western Railroad took over.

Gordon Chappell  
San Francisco, CA

Thanks for bringing this to our attention. The correction has been made on our masthead.

### THE INTERNET

I was glad to see in the [November 1994] issue that my state ranked number 7 in membership of the Friends. Good to see so many railfans out there from different countries and states. I know that some of them must have computers like me and also many have Internet connections. I'd like to correspond with anyone over the net. My Internet address is [MichaelHewitt@XC.ORG](mailto:MichaelHewitt@XC.ORG).

Michael E. Hewitt  
West Palm Beach, FL

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

### REPORT IS MISSED

"The History of 463" is an excellent article. We really look forward to the follow up.... Another feature we're particularly pleased with is "Narrow Gauge Near and Far." The yearly update on locomotive maintenance should be a really high priority.... We hope the next issue will have it so we don't miss a year.

Mr. & Mrs. Gary Rollstin  
Farmington, NM

Yes, it is a high priority, and it appears on page 5.

# 1995 SCHEDULE OF EVENTS

May 27, Saturday  
Opening Day

July 8, Saturday  
Seventh Annual Moonlight Train

July 26–28, Wednesday–Friday  
Volunteer Work Session "A"

July 28, Friday  
Annual Meeting and Program

July 29, Saturday  
Railfan Trip to Big Horn

July 31–August 2,  
Monday–Wednesday  
Volunteer Work Session "B"

October 15, Sunday  
Planned Closing Day



*Engine 463 in the Chama yard on the morning of October 18, 1994. A deadhead move was made that day to Antonito. The consist was two gondolas of cinders, diesel 19 (towed dead), ten coaches, and caboose 0306. The helper engine was 489. Photograph by Joseph P. Hereford, Jr.*



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