

on the 6-cylinder International gasoline engine, with replacement of spark plugs, condenser, points, valve seals, and head gasket. Following major cleaning, replacement of all wiring, and a major tune up, it ran quite well considering it's 50 years old and its lack of maintenance. The rear sanders were made operable through work on the manual release system. The broken casting that allows the train brake air pressure to be adjusted was replaced by a brass piece lathed by a shop employee. The Orange Empire Railway Museum donated a large hand brake from a diesel road engine. The crew added a yellow strobe light to the top of the cab next to the brass whistle and in June painted the locomotive gloss black. In August the lower flat plates surrounding the front and rear couplers were painted safety orange, and the entire upper rear of the cab had four-inch-wide safety orange stripes painted over the black. It is hoped that this 5-ton locomotive can now be used by the railroad to move cars in Antonito, leaving diesel 19 available during the winter to move steam locomotives in Chama.

Fairmont Speeder

The speeder (motor car) restoration project begun in 2001 was wrapped up in Chama during the June and August work



The Fairmont speeders being restored during session C; locomotive 487 switches cars in the north end of the Chama yard. (Photo by George Swain.) Below, the Fairmont speeder takes to the rails in Chama after rebuilding. The crew built a turntable to move the speeder on or off the rails. The new speeder shed is to the right (session D).



sessions. The team has restored D&RGW narrow gauge motor cars 04 and 013 to operating condition. The project involved the installation and testing of many systems and subsystems. Work completed during session C included completion of chassis assembly, gauging of wheel sets, and making final installation of brake rigging and brake levers on 04 and 013. With the exception of mounting the engine, work on 013 paralleled that on 04 (mounting the 013 engine was more complicated than expected). Before session D was over, both motor cars were tested. 04 ran smoothly, reversed easily, and demonstrated that it could pull a load when it towed 013 from one end of the yard to the other. Because of problems with timer and throttle controls, 013's engine didn't perform at its optimum level (these problems were addressed in session F in August). The team will letter the motocars in May 2004 and apply a series of plates providing maintenance and operating instructions.

MAINTENANCE-OF-WAY

Mileposts, Whistle Boards, and Other Signage

The team members painted or touched up 20 mileposts and 34 whistle boards, and set, reset, or painted 7 flanger, derail, and other signs. In addition, they installed the Cresco station sign, straightened and painted the Los Pinos station sign, and straightened the Lobato station sign. Osier is in need of a large yard limit sign made of wood following the 1880-1910 time period methodology. Now that all the mileposts and whistle boards are in place and in good condition, other signage along the line will be made more historic. The goal is to paint signs within one to two miles of the location to that period's standard with Osier 1880-1910, Cumbres 1910-1940, and Sublette 1940-1970. The crew is developing a "MOW Sign Time Frame Guideline" to aid in the placement and painting of all signs using original D&RG standard documents as a guide. This ongoing effort to improve signage throughout the 64 miles of right-of-way provides visitors an opportunity to know where they are along the line and what historic features are present.

Noreen Breeding (l) and Laura Kammerer install weather strip in a Fairmont speeder's window (session D).



Telegraphphone Booths

The Apache Crossing telegraphphone booth, which was rebuilt and painted last year was replaced at its historical location on the right-of-way. The team brought the Rock Tunnel booth east of mile post 315 to Chama for repairs on the last day of the August work session. The Bighorn telegraphphone booth, which vandals turned over and rolled down the hill during the summer, will also be brought to Chama or Antonito when the railroad crew has an opportunity to obtain it this fall.

Tree Trimming

During session C, the crew worked eight miles of line from Cresco to Cumbres (5 miles) and MP 305 to 308 (3 miles). They concentrated on tree removal rather than simple trimming. The right-of-way was cleared at least 15 feet from the center line of rail. In session D, the team worked 14 miles of line from Narrows to Cresco (6 miles), MP 328 to 326 (2 miles), Osier to Toltec Tunnel (3 miles), Phantom Curve to Mud Tunnel (1 mile) and MP 302 to 300 (2 miles). They used a speeder to access between the tunnels.

STRUCTURES

Antonito Depot

At the request of Antonito Mayor Raphael Gallegos, seven Friends made an initial general inspection of the early 1900 depot on June 16, 2003, to determine its physical condition and to make recommendations for repairs and continued preservation. Considering this stone structure has been closed for approximately 30 years it is in relatively good condition and well suited for listing in the National Register of Historic Places. The roofing of asphalt shingles is severely deteriorated and needs to be completely replaced. There is extensive water damage to the plaster ceiling throughout most of the building with minor damage to the plaster walls as a result of moisture. The roof supports, brick chimney, interior wood siding, and millwork including the floors, doors, cabinets, and counters are largely intact and sound. The Friends met again with the mayor and town representatives on August 5 and offered to provide assistance in gathering historic information that the city may use in applying to the National Register. The Friends report and other information to be gathered will also assist Antonito in obtaining grant-in-aid funds for necessary repairs and improvement of this significant historic depot, constructed by the Denver & Rio Grande Railroad.

Chama Coal Tipple

During session C, the coal tipple project consisted of annual maintenance and checkup on all machinery and fittings. Coal pocket sumps were pumped and cleaned as usual; water had stood 3–4 feet deep in both sumps. And cleaning of machinery and spaces was ongoing (never-ending). The team offered several demonstrations, including loading and unloading the tipple, to enthusiastic Friends and visitors. No further movement in the west sill (since 1993) was observed.

Osier Section House

The joint Friends/Railroad Commission project which started in 1993 continued in sessions C and D. There was no



In Chama the rebuilt Apache Crossing telegraphphone booth ready for the move to its original site (session E).



In the Chama carpentry shop, Bob Ross primes a sign that will read STATION ONE MILE (session C).



At Osier during session D, Dan Robbins (l), Dave Hoyt, and John Ruhr mount a luggage rack that will be hung in the section house.

work done in 2002 at the site because of the forest closures, so the team was glad to be back. The section house is very near completion. The team finished painting the interior of walls, doors, and window frames and finished building over one-half of the kitchen and bathroom cabinets. Next year the

team will finish cabinets with tile counter tops and back splashes, paint window mullions inside and out, build and install transom windows over A and B main doors, install interior door hardware, and attach bath and kitchen towel bars. Osier station work included finishing all downstairs interior woodwork, ceiling, and all trim including windows, doors, and stairs. Upstairs the crew installed a safety railing around the stair opening and finished about one-half of the trim work. An 8-x-16-foot porch was built on the rear with stairs and platform hooking it to the handicap walkway. Next year should see two windows installed upstairs along with the balance of trim and part of the interior painted.

Chama Depot

Beginning with the May work sessions and continuing in the June sessions, volunteers built the depot deck and freight platform addition on the south end of the Chama depot. The team built two sets of steps and railing, one on each corner of the addition. The new construction made the depot look more like that of the early part of the twentieth century. It also gives passengers and visitors an excellent place for observing activities while waiting to board the train. The team also repaired wind-loosened and torn roofing on the



John Manion grinds welded plate from Chama engine house window in session F. Many windows in the engine house were replaced during the August sessions.



The new cistern cover near the Chama engine house (session F)

depot, as well as placing strips of green, rolled roofing over deteriorated areas to prevent interior damage.

Chama Scale House and Engine House

There were four major projects tentatively scheduled for 2004 that were undertaken during August because enough volunteers were available and materials could be acquired rapidly. The first project was replacing three broken windows in the scale house south of the Chama depot. The team also replaced thirteen broken or missing panes in the engine house. This involved several days of broken glass removal, careful cleaning of the steel frames, and inserting new glass with a considerable amount of glazing compound. One large pane with a hole through it, located in the upper west side of the engine house, was not replaced. Replacement would have required the use of a basket on the fork lift, movement of shop equipment in use, and a general disruption of important locomotive repairs.

Chama Oil Storage Area Walkway

The second project scheduled for 2004, but done this year, involved a dangerous walkway. Nearly all wood decking on a walkway several hundred yards south of the Chama engine house and immediately west of track number 5 was missing or in very poor condition, creating a hazard for railroad personnel and a few visitors who venture along the tracks. The volunteers repaired the 4-foot-wide, 38-foot-long walkway and installed a wood guardrail along the walkway.

Chama Cistern Cover

The third 2004 project finished this year was in the Chama yard. The cover over the regularly used cistern near the northeast corner of the Chama engine house was becoming a safety hazard, especially for employees who frequent the area, because of the deteriorated wood structure covering the cistern. This large cistern, which was constructed soon after the roundhouse, is essentially round, but flattened on the north side where the roundhouse concrete foundation was used as part of the wall. In August volunteers rebuilt

the 17-x-20-foot wood structure. The cistern is filled from the Chama River from a pump located in a structure near the river and below the southeast corner of the engine house.



New wood decking and guardrail on the oil storage walkway.