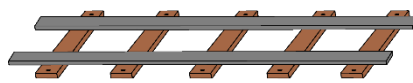


On Track



Vol. 5, Number 9, September 2026

If you are receiving this newsletter for the first time, welcome to the fold! We continue to catalog our visitor logs, and your email appeared! If you wish to be taken off our list, just let us know, but we hope that you will stay with us, follow us online, and return to visit us in person sometime soon. **Additional financial support will never be turned down (maintaining and operating a steam locomotive is expensive)!** Previous editions of this newsletter may be found on our [website](#). If you have comments on the newsletter, please send them to nmheritagerail@nmheritagerail.com or to your humble editor, [John Taylor](#).

FROM THE PRESIDENT

September is here, and one of the biggest weekends of the year for New Mexico Heritage Rail is almost upon us. On September 26–27, we will welcome the public to the Albuquerque South Rail Yards for our fourth New Mexico Railroad Days. What began in 2023 as an opportunity to introduce the public to New Mexico Heritage Rail and Santa Fe 2926 has grown into a celebration of New Mexico's railroad heritage—and an opportunity to show our community what we are building for the future. This year, that has even greater meaning.



From a Vision to a Plan

I'm pleased to announce that the NMHR Board of Directors has formally adopted “Building the New Mexico Heritage Rail Center,” our Master Development Plan for the Albuquerque South Rail Yards. For the first time, we have put on paper what the future of NMHR can look like and how we intend to get there. The long-term vision is the creation of the New Mexico Heritage Rail Center, but we aren't starting with a museum. We're starting with the railroad infrastructure.

Tracks 173, 176, and 177 have already been restored. Restoration of the historic turntable is underway. Funding has been secured for Track 174, and planning continues for a secure operations compound, utilities, maintenance facilities, expanded railroad operations, and eventually the Heritage Rail Center itself.

Like the restoration of 2926, this won't happen overnight. We'll build it one project at a time. And this year's New Mexico Railroad Days will give you an opportunity to see exactly where we're headed. For more information about the Master Development Plan, be sure to stop by the NMHR Information Booth during Railroad Days and talk with Albert Leffler. Albert will be there to walk you through the plan, answer questions, and share what the bright future of New Mexico Heritage Rail looks like.

New Mexico Railroad Days — We Need You!

When visitors arrive September 26–27, they won't simply be attending an annual event. They'll be standing on the future home of New Mexico Heritage Rail. Across the organization, volunteers are working on 2926, track, the turntable, equipment, facilities, vendors, exhibits, partnerships,

and the countless other jobs necessary to make NMRD successful. Some of that work is highly visible. Much of it isn't. But every bit of it matters.

An event like New Mexico Railroad Days doesn't happen without volunteers, and we need your help! We need volunteers before, during, and after the event to help with setup and teardown, greeting visitors, exhibits, activities, crowd assistance, and the many other jobs necessary to welcome the public to the South Rail Yards. You don't have to be a railroader, and you don't need any special experience. Whether you can give us a few hours, one day, or the entire weekend, we can use your help! If you can come out and help, please contact:

Patti Roberts: p.roberts@nmheritagerail.com

Mathew Casford: cro@nmheritagerail.com

This is our biggest opportunity of the year to share NMHR with our community, and it takes all of us to make it successful.

We Also Need Help Behind the Scenes

Our need for volunteers goes beyond Railroad Days. Right now, our Finance Team particularly needs help with basic data entry. You do not need a financial background. You do not need experience with Excel or Google Sheets.

We can teach you.

If you—or your spouse or partner—can give us an hour a month, an hour a week, an occasional afternoon, or more, we can use your help. Elsewhere in this newsletter, you'll read about Don and Linda Francis, who live in Capitan but are making an enormous contribution by helping our Finance Team organize our financial records. They're a great example of something I want every member to understand: You don't have to be a railroader—or even live in Albuquerque—to make a difference at NMHR. Some volunteers restore locomotives. Some rebuild track. Some organize events. Some give tours. Some enter information into spreadsheets from home.

Every contribution moves us forward. Those who came before us rescued 2926. Others spent decades restoring her. Now it's our responsibility to build the organization and infrastructure that will support her—and New Mexico's railroad heritage—for generations to come. The Master Development Plan gives us the roadmap. New Mexico Railroad Days gives us the opportunity to show that future to our community. And our volunteers will make it possible.

I hope you'll join us September 26–27. Better yet, I hope you'll volunteer and become part of making it happen. **One project. One donation. One volunteer hour at a time. Together, we are not simply preserving railroad history. We are building its future.**

Respectfully,

Mathew Casford

President & Chief of Rail Operations

PROFILE OF A MEMBER When we think of our membership, we unconsciously think of the thirty or so folks who reliably show up at the 8th street site every Wednesday and Saturday. However, our actual paid membership is about 400. Many of those folks just support us with their membership fees and donations, but some are hard at work at home on our behalf. Don Francis and his lovely wife, Linda, are two of those members.

Don and Linda live in Capitan, New Mexico, home of Smokey Bear (NOT Smokey THE Bear), although they both started out in San Bernadino, California. Don graduated from San Bernadino High School (home of the Cardinals (the birds, not the papal officials) and Linda from Colton. They were high school sweethearts (my math says that they've been together for over 60 years).



After High School, Don joined the Coast Guard, hoping to be assigned to some of the Vietnam river patrols. That was not to be (probably fortunately) and he stayed stateside for his enlistment. After leaving the Coast Guard, he started a long career in calibration standards.

Don worked for the same company through a number of buyouts and changes for a total of 33 years. When the company was owned by General Electric, he was the operations manager of the GE Sensing Division in Houston. During his career he personally designed a pneumatic pressure standards-instrument for NIST, the country's National Institute of Standards and Technology.

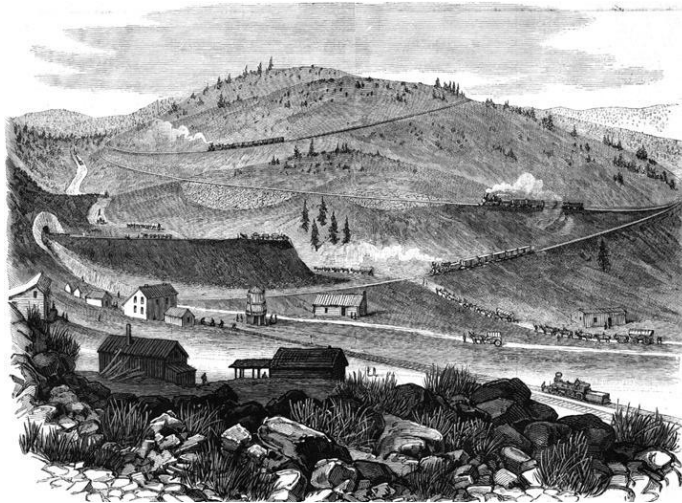
Don and Linda had vacationed in Capitan, and when he retired in 2012, it was a good midway point between one son in Baton Rouge and one in Arizona. Of course, offspring are unreliable, and Capitan is no longer midway, but Don and Linda still find the time to travel (by car!) to the East and West coasts to visit their sons and grandchildren.

Trains have always been an interest, along with woodworking, travel, and restoring a Mustang with one of his sons. Meanwhile, Linda does needlepoint. When asked if she does needlepoint trains, she replied, "Why, yes, a few." When asked if he does needlepoint, Don (and Linda) just laughed.

When they got to Capitan, they looked around to see "what there was to do in New Mexico" and the 2926 popped up. He and Linda joined our select group in 2025 and he has focused on helping Mike Castillo, Mat, Spencer, Karla, Phil, and Meg in straightening out our financial records. So even though he may not be here every week, he is making a huge contribution from home, and we are very grateful.

A SHORT HISTORICAL NOTE: We summarized the story of the "battle" for Raton Pass between the Denver and Rio Grande and the Santa Fe in the November 2022 issue of this newsletter (all past issues are available on the NMHR website!). However, once the Santa Fe "won" the rights to build into New Mexico, the hard work of laying track began. Uncle Dick Wootton's toll road had been graded across the 7,700-foot summit, but constructing an operating railroad was another problem indeed.

It was realized from the outset that a tunnel below the summit would be necessary, but a set of switchbacks across the summit was installed while the tunnel was being bored. These switchbacks, while functional, were precarious. The grade was as much as six percent in some places, significant backing on the switchbacks was required, and there were several derailments.



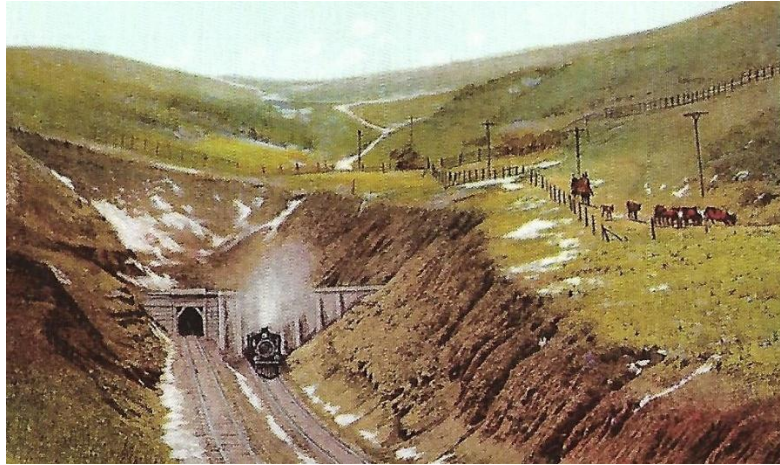
Switchbacks in Raton Pass

Work on the first tunnel began on September 1, 1878, and the first train passed through the completed tunnel exactly one year later. The tunnel was 2,041 feet long with a 1.9% grade. It was supported by timbering and shaved more than 1,000 feet of elevation for the Raton Pass transit.



First train through the 1879 tunnel

By 1907, traffic through the Pass had increased to the point that the single-tracked tunnel was a major bottleneck for Santa Fe's transcontinental traffic. In April 1907, construction began on a parallel tunnel adjacent to the original shaft. The new bore was slightly longer (2,790 feet), taller (24 feet versus 17 feet), and concrete-lined with two air shafts. It was also more than twice as expensive as the 1879 work (\$467,000 compared with \$161,000). On July 9, 1908, the *California Express* became the first train to pass through the new tunnel.



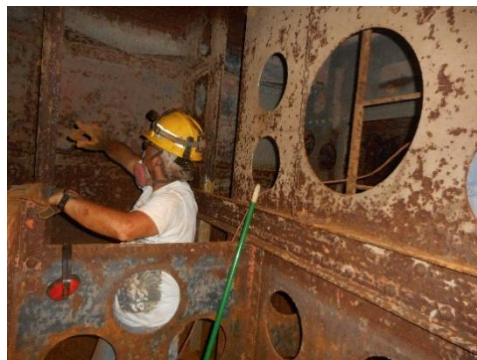
Train passing through new Raton tunnel

By 1953, the diversion of most Santa Fe freight operations to the Belen Cutoff (1.9% maximum grade and 0.6% overall grade versus 3.3% via Raton), the reduction in the number of Santa Fe passenger trains, and the continued maintenance costs of the wood-timbered 1879 tunnel led Santa Fe to permanently close and eventually plug the old bore.

For more information on the history of railroads through Raton Pass see Harper and Signor's lavishly illustrated "Santa Fe's Raton Pass." As a side note relative to our recent article on couplers, the book notes that the operations along the extensive grades in Raton Pass occasionally led to broken coupler knuckles or even drawbars or couplers completely pulling out of cars.

HOW DOES IT WORK: The 2926 tender holds 27,500 gallons of water. This weighs 220,000 pounds (110 tons). Consider the force that this weight could exert on the forward end of the tender's water canister if the engineer applies the brakes in emergency or the force exerted on the back of the tender in the case of rapid acceleration. Consider the force applied to the side of the tender when going around a curve or, even worse, on alternate sides of the tender in the case of an S-curve. In the case of rapid braking, the forward force could add a considerable distance to the stopping distance. In the case of rhythmic sloshing, the force could cause the locomotive to derail.

Tender designers realized these risks, referred to as surging and sloshing in railroad parlance, and installed baffles in the tender to mitigate these forces. As you walk alongside the tender, notice the rows and columns of rivets. Many of these hold the longitudinal baffle plates in place to prevent surging. As you can see from the photograph, the axial baffles which mitigate rhythmic sloshing are connected to the horizontal baffles.



Of course, the purpose of the tender is to provide water for the boiler, so holes in the baffles are sized to allow water to flow forward to the suction for the injector (engineer's side) and cold water pump (fireman's side) in the water canister without surging or sloshing during normal operation.

Railroad tenders are no longer manufactured, except in scale by modelers, but large liquid transport trucks have the same surge/slosh issues. They, too, are baffled, although many of them use geometric plastic shapes made from food-grade polypropylene to disturb the undesirable movement of the cargo.



WHAT'S NEW IN THE STORE: Just arrived, Santa Fe metal signs in mint condition!



How you can help and other tidbits: If you are interested in donating to our cause (because operating a steam locomotive is expensive!) go to our [GoFundMe](#) and [Venmo](#) links! Be sure to check out our [Facebook](#), [YouTube](#), and [Instagram](#) pages as well! Other potential sites of interest: our friends at the [Wheels Museum](#), [Rio Metro](#), and activities at the [Albuquerque Railyards](#). Please see our Membership page to discover our other volunteer opportunities.

Hope You Have a Happy Labor Day!

