



Rail fails, listory buils, and tourists watch as A1&SF 5751 and CD&Q 4900 steam untu the desert hear the Grand Canyon

More than a decade of hard work restoring AT&SF 2926 to operating condition has NMSLRHS members looking ahead to the time when the classic locomotive takes to the rails once again. Recently, thanks to our mentors from California, four of those members had a taste of big steam in action. In the following article by Albert Leffler, they summarize their experience crewing on the oldest surviving 4-8-4 steam locomotive.

RECOLLECTIONS FROM THE 3751 GRAND CANYON TRIP 2012

May 14 – 19, 2012, witnessed a remarkable steam-powered excursion *"The Grand Canyon Limited,"* originating at Union Station in Los Angeles and traveling to the Grand Canyon and back. Powered by the San Bernardino Railroad Historical Society's 4-8-4 locomotive Santa Fe No. 3751, the trip was sponsored by the Central Coast Railway Club of the NRHS with contracted support from Amtrak, BNSF, the Grand Canyon Railway and the Arizona & California Railroad. The journey in part was a celebration of Arizona's Centennial year.

The consist was made up of 3751 at the head end, two P42 Amtrak Diesels, thirteen privately owned passenger/crew cars and one Amtrak-owned car. Of special note was the round trip from Williams to the Grand Canyon featuring a double-header with 3751 and the Grand Canyon Railway's steam locomotive CB&Q 4960. During the six day excursion *"The Grand Canyon Limited"* traveled over 1300 miles.

Under restoration in Albuquerque is another 4-8-4 locomotive, NMSL&RHS Santa Fe 2926 It is a younger, larger and more powerful sister to 3751. Realizing that 2926 will soon be taking her place at the head of similar excursions, the staff of SBRHS graciously invited four members of NMSL&RHS to become part of the 3751 crew, and by observing and working side-by-side, learn first-hand what it will take to operate and maintain our big Northern when on the road.

NMSL&RHS members selected were Chief Mechanical Officer Rick Kirby, Board Secretary Gail Kirby, and members Dave Van De Valde and Albert Leffler; Albert serving as head of the NMSL&RHS Advisory Council.

We were not sure what the 3751 crew expected when we showed up. But if they expected four NMSL&RHS observers lounging around with clipboards taking notes they were sorely mistaken. Instead, they got a hard-working supplement to their crew working side-by side getting just as grease-stained, sweaty and plain dirty. The 3751 crew members were amazing teachers and completely unafraid to apply old fashioned on-the-job-training. Minus the clipboards, our physical notes were taken with our cameras.

To most people, the opportunity to be part of an active steam crew would have been that of a lifetime. To us, this was just the first of what we hope will be many trips to come with 2926. There is of course that "Romance of the Rails" when around steam locomotives. The 3751 crew certainly made it look wonderful to the passengers and the thousands of observers along the 1300 miles of rails. But behind the scenes was a well-rehearsed routine that made it all possible.

What follows is a compilation of the experiences of the four NMSL&RHS members:

First and foremost, an excursion of this magnitude easily takes over a year to plan. "*The Grand Canyon Limited*" required coordination with SBRHS, Amtrak, BNSF, The Grand Canyon Railway, The Arizona & California Railroad, The Central Coast Chapter of the NRHS, the Trains and Travel tour agency, multiple hotels, bus companies, Fire Rescue departments in multiple states and cities (for water to refill the tender), food providers, insurance companies, engine crew (steam qualified engineers and firemen), merchandise suppliers and sellers, volunteer recruitment and supervision, etc. This planning takes a lot of everyone's time and it is, without lifting a wrench, hard work. For this major excursion, Paul Prine, President of SBRHS, became Paul Prine, SBRHS Business Manager, tasked with the many decisions and commitments involving 3751 and her crew.

Responsibility for the operation and maintenance of 3751 fell to SBRHS Chief Mechanical Officer Bob Kittel. Steam locomotives by their nature need nearly regular maintenance, usually every 100 – 150 miles of running. They also need to have the tender's water supply replenished. Those were some of the reasons that during the steam era, railroads had water facilities and often a roundhouse every 100 - 150 miles or so. In such facilities, steam locomotives could be quickly serviced by experienced railroad crews having all the necessary lubricants, tools and if needed, spare parts.

Roundhouses and water facilities disappeared from the landscape long ago. Today, the essence of the roundhouse must travel with a steam-





Two views of the 3751 fireman's position. In the photo on the left, Operations Manager Bob Kittel takes a turn as fireman on the run from Grand Canyon back to Williams. In the photo at right, Business Manager Paul Prine,

looking out from the fireman's side can see a clear track

powered train in the form of a tool car complete with spare parts, tools, and the all-important variety of lubricants to be reapplied at least every 150 miles. For this excursion, the tool car also served as a crew car, merchandise car and observation car with open doors for passengers. No air conditioning here across the desert with 107° temperatures!

ahead.



NMSL&RHS CMO Rick Kirby gets his time "shooting the rods," assisted by Gail Kirby reloading the grease. Amtrak's Eric Smith observes as his turn will be coming up. Matt Wiles watches below for tell-tale grease drip.



AT&SF 3751 crew member Ken Skolyan holds the ladder for Jim Campbell who is waiting for the jug of oil from NMSLRHS member Dave Van De Valde. The oil is for the rear cross-compound air compressor.

The four NMSL&RHS members spent most of their time in the tool car as part of the 3751 crew and when in full safety gear, received instructions on duties at the coming maintenance stop. Our ID badges were given up upon exit and given back when boarding to make sure no one was left behind. We started with simple duties such as hauling supplies from the tool car, holding ladders while 3751 crew refilled lubricator reservoirs and returning tools to tool boxes slung underneath the tender. Graduation to more complex duties came swiftly.

Perhaps the most critical lubrication for 3751 involved "shooting the rods". All side rod friction bearings had to have a special grease forced between surfaces. This is accomplished by using an Alemite "gun". The special air-powered gun is a unique tool for lubricating a steam locomotive's bearings with hand-fed cylinders of grease. We all had our hands-on time both working the gun and feeding the grease. This is not a solo task. One person operates the gun, another feeds the grease and usually two observers look for tell-tale signs that there is sufficient grease and none is wasted. There were also two teams at work simultaneously: one on the engineer's side and another on the fireman's side.

Both 3751 and 2926 are 4-8-4 locomotives built by the Baldwin Locomotive Works for the Santa Fe Railway. Built in 1927, (and rebuilt in the Albuquerque shops in 1941), 3751 is the oldest surviving 4-8-4. Built in 1944, 2926 received major modifications in 1946. The two are more alike than they are different. However, the one major difference that will most affect 2926 excursions is the 1946 modifications: the application of Timken roller bearing side rods. This difference was never more apparent to the four NMSL&RHS members when every 100 - 150 miles they were on the ground, often in the middle of the 107° desert, "shooting the rods". Compare that to the future when 2926 with Timken sealed roller bearings will be able travel between 800 – 1200 miles before needing to be serviced. While we politely refrained from talking about the service advantages of the 2926 Timken roller bearing side rods, the 3751 crew had no reservations with comments such as, "...bet you won't miss this little exercise..." to **"If we are ever** double-heading these two locomotives, don't even think about setting up a lemonade stand while we are slaving away..."

As we look forward to having 2926 back on the rails, the aspect of having roller bearing side rods will make a huge difference when planning major excursions such as the "*Grand Canyon Limited*" because mandatory stops for servicing will be fewer and farther in between. And if on busy mainline tracks this means less time stopped and potentially slowing down freight traffic.

The 3751 consist was to have included an auxiliary tender to lengthen the time between water stops. However, the intended aux tender could not make it to Los Angeles in time so there were last minute schedule adjustments for more frequent water stops. The larger 2926 tender holding 24,500 gallons of water compared to the 3751 tender holding 20,000 gallons of water will also make a difference in being able to run further before stopping.

We definitely saw the need for NMSL&RHS to start thinking about having our own Tool & Crew car and it would be wonderful to have our own auxiliary tender. All of course in due time...

Regardless of the side rod and tender difference, the lessons learned with the 3751 crew will almost all be applied when running 2926. Safety is foremost and looking and listening 100% of the time is paramount. Mechanically, the locomotives are much alike in construction, maintenance and operation. Lessons learned during our six days with 3751 were but a primer for more lessons to come, hopefully with the 3751 crew as our steadfast instructors.



AT&SF 3751 and the two Amtrak P42 Diesels that provided extra traction when needed, and dynamic braking and head end power for the 14 cars of the consist.

As the "*Grand Canyon Limited*" neared its home base in Los Angeles, everyone agreed that it had been a very successful excursion. On the last leg back to Los Angeles, the engineer and fireman tended to their duties in the "Front Office" of 3751, while a number of very tired road crew members kicked back in the sparse quarters of the open crew car. Even though they seem to be a bit road weary, would they do it again?

You bet they would!!



The ""Front Office! *Inside the 3751 cab, showing controls managed by Engineer (Rt Side) and Fireman, (L Side)*



Homeward Bound: *Crew members in the open crew car resting up after the last service stop.*



National Train Day visitors get an up close look at the huge 2926 water-fuel tender, fully restored to better than new condition.

NATIONAL TRAIN DAY

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National Train Day 2012 gave our 2926 restoration crew an opportunity to showcase their hard work—the locomotive's massive water-fuel tender, fully restored and ready to use.

Viewing the tender restoration as an easier task than the locomotive itself, our group chose to restore it first. It was a good decision. Restoring the tender provided our members with an opportunity to evolve into a real restoration team. The tender was finished four years ago, and an experienced group of restoration workers moved on to the locomotive.

The fully restored water-fuel tender left the restoration site for the first time, thanks to a valuable assist from AMTRAK. The tender was pulled from the restoration site by an AMTRAK unit, towed to the Train Day venue at the Alvarado Transportation Center, and displayed between AMTRAK, RailRunner, and BNSF units. It drew a lot of attention.



'Banging on a 2900' in this issue focuses on one of our elite welding tea other members of the 2900 group, Carlos has multiple talents and skills. Hi ranges from medicine to advanced welding technology. His deep roots here a bona fide native New Mexican. With a great sense of humor, broad knowl motivation to see 2926 under steam again, Carlos is a real asset to the rest In the following narrative, NMSLRHS President Mike Hartshorne describes y member of the fine team that is bringing 2926 back to life.—Editor



Carlos Eduardo Osuna was born a war-baby in 1945 in Albuquerque, New Mexico. His family had been in New Mexico a long time. In 1891 his grandfather Eduardo Eligio immigrated from Mexico where he had trained in Medicine and served as a professor at the University of Monterey. With him came his wife and first son. He was counsel for the Mexican government before he became a US citizen. He set up a general practice, became the charter President of the New Mexico AMA, and went on to have seven more children. The last was E.E. "Babe" Osuna, Carlos' father.

On his mom's side of the family the New Mexico roots went even deeper. In 1535 an ancestor had a land grant at Tome. The family was represented in the Territorial legislature by Senator Jaun Jose Baca who was also Mayor of Socorro. Senator Baca proposed the New Mexico School of Mines and donated a 27 acre site for the campus. The Rio Abajo families knew the Osunas so nobody was surprised when "Babe" married Isabel Romero.

When Carlos was born his mom had gone from Albuquerque to Alhambra, California to be with family while Babe Osuna was off in Europe with the Signal Corps getting himself wounded at the Battle of the Bulge. There would be two more children, Carlos sisters, born to the family. Naturally, Carlos the kid played on the locomotive in Coronado Park.



Carlos graduated from Albuquerque's Valley High School in 1963 and attended the University of New Mexico for four years as a pre-med student studying Chemistry and Biology. Then amnesia after a car wreck temporarily destroyed his memory of those studies. He needed an income and had an offer to join the Local 412 Plumbers and Pipefitters as an apprentice. That five year program started him off studying practical and theoretical aspects of the trade while earning a living. At the end of the apprenticeship he beat out classmate Rick Kirby to take first place in a competition to represent his Local at a national competition held each year at Perdue (the Boilermakers) University.

Carlos became a Journeyman Pipefitter in 1974. He would work at projects large and small including three hitches in New England with nuclear power plants and paper mills. There were jobs in New Mexico at the Four Corners and San Juan power plants. (Jobs like that are all about steam!) Other jobs were at the University of New Mexico and the Sandia Laboratories in Albuquerque.

Got Milk? Though Carlos worked in many places, one of his proudest accomplishments was close to home and it didn't even involve steam. It involved milk in his native New Mexico. He can be rightfully proud of his work for Dairy Concepts in Portales in 2003. The work was essentially artwork in stainless steel. (See Pictures below.)

Carlos Handiwork:

These pictures show some of Carlos work for Dairy Concepts. Milk processing systems require very sanitary conditions, and thus lots of stainless steel. It is very specialized welding, and it requiresgreat detail and precision. It is little wonderthat Carlosis proud of his artwork.

Along the way Carlos met a fine woman, Jo Ann tamed him for 24 years. She was a nurse working at New Mexico Dermatology. After developing heart problems, she received the 49th cardiac transplant in the State of New Mexico. She left Carlos a widower 9 years later in the year 2000 after a losing fight with colon cancer.

Carlos did a hitch at the Michigan State Instructor program and spent 13 years as an instructor at the 412 campus working with the likes of Larry Atwell to toughen up and improve the training of new apprentices. After his own successful fight with colon cancer and a renal tumor he retired in 2005. Larry told him about the NMSL&RHS.

Then one day Rick Kirby made his pitch to the 412 members asking for help and the next thing you know Carlos became a stalwart of the 2926 restoration. Now you can't open the gate at 1833 8 th, NW without finding Carlos pitching in with his welding and fabrication skills. His grinds and signature welds are everywhere. The driver counterweight repairs, the "do it yourself" Timken roller bearing pullers, a remarkable assortment of valve rebuilds, and a lot of odd parts and pieces have his fingerprints.



Standing ready next to 2926 with his welding equipment, Carlos reveals a wonderful sense of humor to accompany his welding skills.



When 2926 was in operation during WWII and the Korean wars, time pressures and level of technology resulted in "less than optimum" welding when the locomotive was in the shop for repair. Now, with more time, better technology and the skills of a guy like Carlos, the old welds are ground away and replaced much finer work. Here Carlos grinds on old welds relating to counterbalancing the 80 inch drive wheels of 2926.

Soon he'll be at it doing the super heater tubes and who knows what else. Even better, Carlos is always there with a twinkle in his eye to suggest a simple and effective solution to a problem that reminds him of a School of Hard Knocks experience. (He has several graduate degrees from that school that did not come with a piece of fancy paper tied in a ribbon.) When the 2926 runs not even his (stylish) giant handlebar will be able to hide the grin on Carlos' face. Particularly if it is hanging out of the cab window.



The New Mexico Centennial celebration in downtown Albuquerque drew large crowds. We were fortunate to have our booth located at the corner of Central Avenue and Sixth Street. Several members were at the event throughout the day, but most of the hard work at the booth was handled by Bob and Karla DeGroft, Rick and Gail Kirby, and Nancy Rutkiewic.

In the first picture below, Bob DeGroft in NMSLRHS full dress uniform tends the NMSLRHS booth. The second picture shows the view from Central Ave. Down Sixth St. toward one of four bandstands. Our booth is in the left foreground.

The location gave us good traffic without too much noise from the bandstand. Though we didn't break any records for sales, we did sell some t-shirts, hats, cups, etc.. We may have gained more in the long run with the exposure we received from visitors to the booth.

The new collapsible rolling display counter that Bob DeGroft built really works well in such venues. We expect it to get a lot of use at future public events.





THE SIDE ROD BEARINGS ARE BACK

The 2926 side rod bearings—all 3000 pounds of them—are back in Albuquerque after their trip east. They are in fine shape and are ready to be reinstalled. Their installation will require creation of special tools.

Tools for removing and reinstalling the bearings are products of innovation and hard work by our intrepid puller-pusher team of Dave V., Ralph, and Eric. Dave transferred their brainstorming to CAD designs. Using those designs, machinists Ralph and Eric produce the tools.

Some tool fabrication for the reinstallation is still underway. When they are finished, reinstallation of the bearings and rods can begin.

Completion of the bearing and rod task is a significant milestone. It also meant that 2926 was immobilized for the duration of the task.

On this task, we received a lot of assistance from around the state and beyond. Hopefully, we will be able to detail the process in the next newsletter, giving credit to those who provided such critical help.



The side rod bearings still packed in their custom built crates are stacked neatly in a storage container next to the shiny side rods.

NMSLRHS STORE

Store keeper Pete Adair would like for all our friends and supporters to know that he has a large inventory of railroad items for sale, all profits of which go toward the restoration of AT&SF 2926. Most items, such as T-shirts, caps, cups, mugs, and art relate to the 2926 restoration effort, with a variety of graphic images. There are also other, more general rail related items available. They include books and art as well as a limited number of collectible railroad calendars, lanterns, and related memorabilia.

For those who cannot come by the site to shop, we do accept telephone orders, and major credit cards are acceptable. Our telephone number (505 246-2926) will be answered only on regular workdays, (Wednesday and Saturday). On non-workdays, you will reach our voicemail. Please leave a message with your name and phone number, and we will contact you on the next workday.



TWO VISITORS ARE KEY TO FUTURE PLANNING

BNSF Official And Albuquerque Mayor Visit Restoration Site

Visitors are very important to the 2926 team. All visitors are welcomed and offered a complete tour of the site. We hope they will become supporters, and spread the word about the 2926 project. Maybe a few will join NMSLRHS and participate directly in the restoration. But there are some visitors who are absolutely necessary to our planning for future steam rail adventures. They are the ones who represent the many individuals and organizations mentioned in the AT&SF 3751 article on page one of this newsletter. Two recent visitors, Albuquerque's Mayor and a Regional BNSF Official are in that important visitor category. They represent our home base and the rails upon which we hope operate.

MAYOR RICHARD BERRY VISITS 2926

Albuquerque Mayor Richard Berry and members of his staff visited the 2926 site recently.

During that visit, the need of a permanent home for 2926 was discussed. The Society would prefer a location near the turntable at the old Santa Fe Railyard near downtown Albuquerque. The City now owns the railyard, and has signed an agreement for its development.

Two active steam rail concepts have been studied. Either would allow maintenance and operations of several steam locomotives while serving as a working museum open to the public.

The Society hopes to persuade all parties involved in the Railyard development of the wisdom of honoring and saving the historical purpose of the buildings where thousands of workers labored over hundreds of steam locomotives during the early & mid-1900's.



(L) Clem Harris and Rick Kirby watch as Mike Hartshorne briefs Mayor Berry on the 2926 project.
(R) Mayor Berry climbed up on the front of 2926 to get a close look in the smoke box.





BNSF OFFICIALS VISIT RESTORATION SITE Visitors Bring Cash And Hope For Future Cooperation

From the May 2002 move of 2926, when BNSF provided two diesel units to escort 2926 to the current site, the railway company has been helpful. Some months ago, BNSF even took a few of us for a ride on their employee special.

Darryl Ness, BNSF Southwest Regional Manager, Joe Faust, BNSF Public Affairs Director, and other BNSF officials were on the complimentary trip. Frank Gerstle briefed Ness on the 2926 project and our plans for the future.

Subsequently, a request for assistance by our premier proposal writer, Chuck Mangold, resulted in a favorable response from BNSF. The response was that the BNSF Foundation would assist with the staybolt repair on the locomotive's massive boiler.

Ness and Casey Pena, Superintendent of Field Operations for BNSF's Mechanical Department decided to deliver the check in person and take a look at our operation.

It is an understatement to say that BNSF is important to our future plans. They are one of the **most important organizations.** Any extended excursions will mean operation over BNSF rails. We welcome their assistance, and look forward to a long friendship.



Darryl Ness prepares to present a \$15,000 check to Frank Gerstle. Ness and Casey Pena hold 2926 staybolt caps. The BNSF Foundation grant will fund the cost of staybolt repair and replacement, a necessary task in rebuilding the 2926 boiler.

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NMSLRHS ELECTION RESULTS

The annual Board Of Directors election for 2012 was a very calm affair. Expiration of the BOD terms of Dave Traudt and Rick Kirby meant those two positions were open.

Both chose to stand for reelection. They had no opposition. Both were reelected.

That could lead an observer to one of two assumptions: Either the voting members are satisfied with the current structure of the organization, **OR** no one wants to add all that additional work to their schedule.

Yes, NMSLRHS members do realize that there is a lot of work associated with being a member of the Board of Directors.

AND MEMBERS DO APPRECIATE THE HARD WORK OF THE BOD!!!

* * * CURRENT BOARD MEMBERS Elected Members

Bob DeGroft, Mike Hartshorne, Gail Kirby, Rick Kirby, Andy Rutkiewic, Ernie Robart, Dave Traudt

> **Ex Officio Members** Frank Gerstle, Past President Jon Spargo, Chief Safety Officer

TRACK OUR PROGRESS ON THE NET

If you are reading the paper version of this newsletter, you are only getting a glimpse of the 2926 restoration picture. Our site at 1833 8th St NW has far more action than can be documented in a few sheets of paper.

Our internet site contains more than a decade of project activity. There you will find a wide range of information about the restoration and our organization. There are thousands of pictures, details of restoration tasks, links to other rail heritage organizations, and a color copy of this newsletter.

For those who do not own a computer, borrow a friend or relative's machine, or find one at a public library.

Our web site is: www.nmslrhs.org.

CHECK ON US REGULARLY!!

MEMORIES OF NEW MEXICO RAIL HISTORY

The New Mexico Steam Locomotive & Railroad Historical Society is seeking photos, news articles, personal accounts, and other memorabilia related to the history of steam rail activity in New Mexico—especially materials relating to our famous locomotive and its powerful, high speed siblings.

In "Banging on a 2900" Carlos Osuna reveals that in 1891 his paternal grandfather immigrated to what would become the State of New Mexico. A decade earlier, the Atchison Topeka & Santa Fe Railroad had arrived in Albuquerque, and established a large steam maintenance facility.

From the days of the nation's westward expansion in the late 1800s, until diesel power replaced steam, many New Mexicans, including some of Carlos' relatives worked for the railroads. Maybe some of your relatives did also. Unlike today, when most everyone carries a camera, photographs of regular work activities were rare.

Like the photo below, from the Library Of Congress, those rare photos were shot by professional photographers who often preferred glamorous travel scenes to hot dirty work scenes. The photos, together with more personal photos taken by family members and friends, found their way into family albums and other cherished collections.



This is a rare photo of work inside the AT&SF Rail Shops in Albuquerque during WWII. Several shop employees are shown using the steam powered drop hammer to produce a steam locomotive drawbar from a round steel bar. Photograph by Jack Delano for the Office of War Information in March 1943

Those albums and collections, handed down through the generations, contain the story of the era in which AT&SF Locomotive 2926 operated. In acquiring copies of photos, clippings, and personal stories, we can produce an accurate history of the operation of 2926. We can also give credit where credit is due—credit to those relatives and friends who worked for the railroads that contributed greatly to the development of the Great State Of New Mexico.

Did you have family members or friends who worked for New Mexico railroads during the steam era?

Do you have any steam era pictures, clippings, or related memorabilia?

If you would like those memories to be included in our historical archive, please contact us:

Via email at: nmslrhs@nmslrhs.org

By telephone at: 505 246-2926 (leave a message if no one answers) —

OR, drop by the AT&SF 2926 restoration site at 1833 8Th St NW any Wednesday or Saturday for a visit and a site tour.