



STACK TALK

November 2006

The official newsletter of the Adobe Western Railroad,
Phoenix, Arizona, operated by the Maricopa Live Steamers
Railroad Heritage Preservation Society.

www.maricopalivesteamers.com

© 2006 Maricopa Live Steamers Railroad Heritage Preservation Society

News from the President



Perry McCully

This is the next to the last letter of this fine newsletter and it's coming to an end. It has been fun and I'm ready to pass it on to someone else.

I think we had a great meet. Everyone thanked me for one anyway. It must be so. I thank everyone that came out and helped. Thank you Betty Moore for making the meet very successful. You did a great job. Thanks to all of the out-of-town guests that came. The Spring Meet will be held March 15th through the 18th in 2007. See you here.

Elections are here. The ballot is included in this issue of *Stack Talk*. If you mail it to me, be sure I receive it by Friday, November 10th, or bring it to the 10 a.m. business meeting on Saturday, November 11th. We have some very good candidates that will do the best thing for this club.

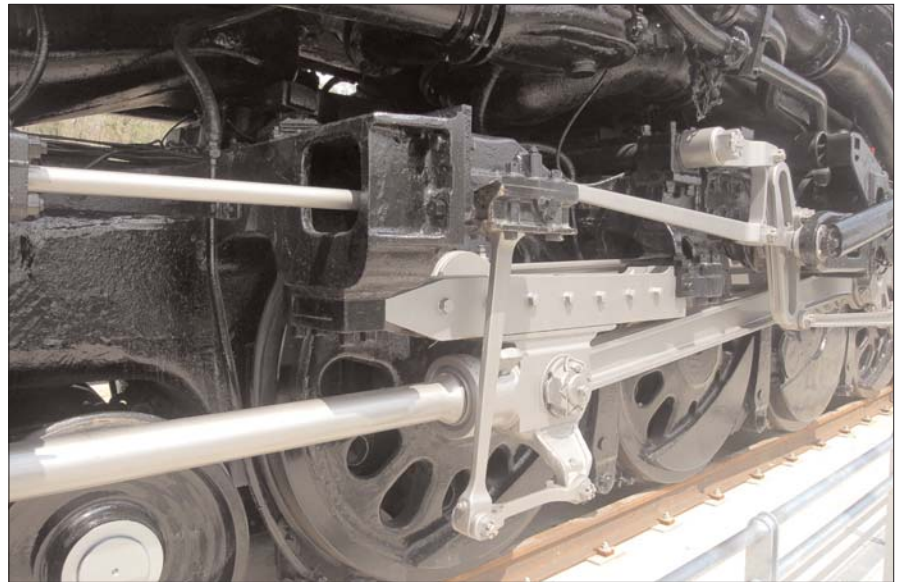
I need a train crew on November 18th at noon. The A.M.R.S. garden group is having a clinic on the patio.

If you have digital pictures of the meet and would like to share them, send them to our webmaster Jim Manley as soon as you can. We would love to see them.

Tax time is coming very fast. Your donations are much appreciated.

Mike Russell needs help decorat-

Continued on page 2



MLS member Joe McKiernan photographed Union Pacific's 4023 Big Boy on display in Omaha, Neb. During the late 1930s, the Union Pacific often used helpers to move trains from Ogden to Wasatch, Utah. The UP wanted to simplify this move so they asked their Department of Research and Mechanical Standards (DoRMS) to design a locomotive that could pull a 3600-ton train unassisted over the 1.14 percent grade of the Wasatch.

The designers determined that to pull a 3600-ton train, a tractive effort of 135,000 pounds would be needed. Assuming a factor of adhesion of 4.0, the weight on drivers would have to be 4 x 135,000 or 540,000 pounds. Given an axle loading of 67,500 pounds each, this would require 8 drivers or an X-8-8-X wheel arrangement. The designers agreed upon the 4-8-8-4 design. Next, the horsepower and cylinder sizes were computed based on 300 psi boiler pressure. Although they weren't planning to pull these freight trains at 80 mph, the DoRMS designed them for 80 mph to have a sufficient factor of safety built into the design. What resulted is considered by many to be the most successful articulated steam locomotive ever built. The first, 4000, was delivered to Omaha at 6 p.m. on September 5, 1941.

News from the Vice President

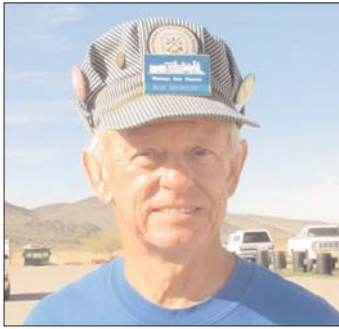


Betty Jane Moore

The 2006 Fall Meet was a wonderful success. Thank you all for your help. I would like to extend a special thank you to Christine Borders, Stephanie Marks, Karen Roderick, Charlie Downs, Joyce Nelson, Jami Lowe, Michelle Winkler, Betty Ann McCully and Carlyle Rossow for all their help with the preparation and serving of meals and to Margaret Ann and Ken Bain for all their work on registrations. Jim Brown and his crew did their usual outstanding job in the tower.

Continued on page 2

Treasurer's Notes



Bob Douglas

The Fall Meet was a huge success even though it was smaller than some previous meets. The outstanding weather helped making "Training" an absolute joy. Our guests were impressed not only by the improvements made on the Adobe Western Railroad but more importantly by the friendliness of the MLS members. Thank you to all of the members and spouses who worked hard to make the meet a success.

So far, 118 members have paid their 2007 membership dues. Have you paid your 2007 dues? If you did not, please send your check to me as early as possible.

During the month of October, MLS train crews made 62 trips carrying 998 passengers. This is an increase of 100% over September.

Be sure to attend the November meeting and cast your vote.

Bob Douglas

News from the President

Continued from page 1

ing the clubhouse the day after thanksgiving.

Christmas is around the corner. Start now bringing a toy for the toy drive. Tom Knorr is allowing us to store the toys in his container. Bill Myers has already come up with 20 to 30 bikes. The bike can be assembled or in a box. Small toys need to be new in a box unwrapped. Don't forget about the potluck Christmas party December 9th starting at 6 p.m. It would be great to see this whole club come out and enjoy each other's company. Come out and decorate your train and run at night after a great meal with friends

Perry McCully

The Secretary's Station

Hello Train Buffs,

The following were the happenings at our meeting in October. Here in no particular order are the exciting items.

1. The Fall Meet is fast approaching and we are busy getting ready for our guests. Come and join us Thursday, October 19th to Sunday, October 22, 2006. Sign up on our website to participate.
2. The East yard is under construction; the next step is the turntable. Last month the yard was reported in the *Stalk Talk* as the West yard, but that yard is done, Sorry about that.
3. We provide free train rides to the public on Sunday's from noon to 5 p.m. from September to May 31st.
4. The yearly officer election is at our next general meeting November 11, 2006.
5. Check out our website! www.maricopalivesteamers.com
6. First Operational Meet January 17-19, 2007. Sign up on our website to participate.
7. The Toy Drive is December 9 and 10, 2006. Bring a toy for the children and take a free ride on the train.
8. Membership dues were due October 1, 2006.
9. Board of Directors made a motion to have the Chief Boiler Inspector added to the board of directors and the By Laws will be changed adding to Article IV, Section 3B, e. Chief Boiler Inspector. The

Greetings From The Greeter

Another meet is over. And what a fantastic meet it was. The success has to be credited to all the people who worked so hard to give us good track, and lots of it. To all the people who made sure we were well fed with good food, and lots of it. Special thanks must go to Betty Jane Moore and her helpers for organizing and facilitating the meet. And to top it all off the weather was just perfect. The type of Arizona weather that makes tolerating the summers worthwhile.

We enjoyed the company of 72 out of town guests from 11 states plus Alberta, Canada. This compares favorably with the 2005 Fall Meet when we had 44 visitors from 9 states plus Alberta. It's interesting to look back just five years ago when our 2001 Fall Meet was attended by

From the Vice President

Continued from page 1

Thank you again and here's looking forward to an even better Spring 2007 Meet.

Our next big event is the Toy Drive with the United Phoenix Firefighters on December 9th and 10th from noon to 5:00 p.m. both days. Please put this on your calendars and please be prepared to donate toys and bikes. The fire trucks and our very own Phoenix firefighter/paramedic, Paul Moore, will be in attendance on both days. We are expecting this to be the biggest one ever. If you cannot come during the day, be sure to come for our joint Christmas Party with AMRS on Saturday night December 9th, and bring a toy. We are counting on you to help. It will be great fun for all.

Keep it safe out there. Big kids (that's us) having fun, helping each other, and keeping the smiles on little kids' faces.

Happy rails to you, until we meet again,

Betty Moore

addition will be posted in the November *Stalk Talk* and voted on at the next general meeting. *[Please see page 6. Ed.]*

10. Thank you to all who have donated to our railroad!

Chris Borders

43 out-of-state visitors. At that meet our track comprised the Pottsville and Bobberg Subdivisions and half of the Arntchoo Subdivision. The club house was just a dream. We've come a long way. But no matter how much track we may have had or what facilities were available the meets have always been fun.

Attendance breakdown:

Alberta	1
California	35
Colorado	1
Michigan	1
Minnesota	2
Nevada	12
New Mexico	9
Oklahoma	1
Oregon	1
Pennsylvania	1
Texas	4
Utah	4

Margaret Ann Bain

At The Throttle Getting steamed up over steam Part II

Part I was published in the October issue available in the Stack Talk Library at www.maricopalivesteamers.com

Reprinted with permission from elynews.com, the website of the Ely Times, Ely, Nevada. The Nevada Northern Railway web site may be found at www.nevadanorthernrailway.net.

By Jerry Cesak

(Editor's Note: Last week in Part 1, Jerry Cesak explained how he came to love steam locomotives. He's about to get his chance to be at the throttle of one for the first time, as Nevada Northern Railway Shop Foreman Al Gledhill introduces him to the iron horse he has rented.)

Al was getting steam up, a process which, he explained, takes about two hours when she's had a fire in her the previous day, four hours from a dead cold start. That was the reply to the first of my thousand questions for Al, who kindly realized that I was not just another renter; I was passionate about every moment of this.

I noticed another man on the platform in overalls, armed with a long-spouted oil can and a pneumatic grease gun. He was Richard Barnes, a hostler who knows every seal, joint and fitting of the NNRy's locomotives. He was meticulously giving No. 93 her morning lubrication. I decided to give Al a break and spent the next half hour following Richard around like a puppy, lobbing 10 questions at him for every drop of oil he squirted.

Back in the cab again with Al, our pressure was approaching the desired 190 psi when a cheerful young man in overalls climbed up and introduced himself as David Turner, the fireman for my excursion. David took over the coal tossing from Al, who climbed through the forward cab window onto No. 93's boiler casing to open the valves for the electric dynamo and whistle.

Shortly, we were joined by a guy who looked like Penn (of Penn & Teller) Gillette's brother. This was Kurt Dietrich, our engineer. Kurt would operate the engine within the East Ely yard limits, then closely supervise me when I took over the

throttle. Meanwhile, he'd inherited the beleaguered Al's job of fielding the five questions I asked for every one answered. He did so with kindness and patience.

Preparing a steam locomotive to



Author Jerry Cesak at age 6 in 1957 when his father took him to see his first steam locomotive in Winnipeg, Canada (left) and during his 2005 visit to the Northern Nevada Railroad where he operated Alco 93.

roll is a bit more complicated than putting a key in the ignition and backing out of the garage. For the next hour, David and Kurt cleared and checked the boiler's two water glasses, verified the water level with the boiler petcocks, and charged the two air compressors above the smoke box. They tested the independent brake system (we'd be pulling no cars, so engine and tender brakes were all we'd need), checked the water level in The 93's 7,500-gallon tender, and ensured that the water injector worked properly. They verified the integrity of her headlight, tender light and reversal gear. They tested her drive wheel sanding system, her steam-driven bell and the two-way radios that keep the crew in touch with each other and the dispatcher in the second floor of the East Ely depot.

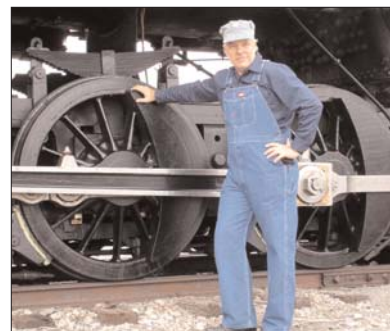
At last, shortly before 9 o'clock, Richard, who would also be our brakeman, climbed into the cab to report the engine was ready to roll.

"You ready to do some railroad-in"? Kurt grinned at me.

As much as I wanted to stay in the cab for the roll out from the engine house, I wanted even more to see it happen. I exited through the small door in the front of the building as Richard opened the massive roll up door of track No. 2.

Imagine my absolute, sheer joy as I stood track side 50 feet in front of the engine house. The morning had a chilly snap to it; the sun had recently lifted above the mountains

to the east, painting the buildings in a butterscotch blush. Number 93 stood waiting just inside, taking up most of the doorway, impatient, powerful, with smoke leaping from her stack into the vent, headlight



glowing, sun sparkling off her red and gold boiler medallion.

I heard the hiss of steam as Kurt moved the reversal gear forward, followed by a rush of air as the brakes released. Her bell echoed through the yard, ping-ponging off the buildings. And with no effort at all, she elegantly glided forward.

To steam fanatics like us, there's nothing more breathtaking than an enormous steam locomotive moving at less than walking speed with her cylinder cocks open, smoke and steam bursting from the stack in great chuffs. As the 93 slowly slid past me, I was mesmerized by the mechanics of turning steam into motion: Cross heads coaxing main rods forward, then nudging them back, drive wheel counterweights rolling over, connecting rods lifting up and down, valves sliding back and forth.

Kurt stopped the engine to let me clamber back aboard, and we were off for a half-hour excursion around the yard. Happily for me, we needed coal added to the twelve-ton capacity tender. Since the NNRy's coaling tower is not yet operational, this was accomplished with a front-end loader. Coaling completed, Kurt took the 93 to the limit of the East Ely yard and stopped the engine. At last my big moment had arrived.

Kurt stood at my immediate left as I took my place on the green cushioned seat box. Good thing he
Continued on next page

Continued from page 3

walked me through the procedure to get her rolling; I was too nervous to remember what I'd watched him do before. Under his direction, I first moved the reverse lever to the full forward position. Then I released the independent brake valve to a thrilling whoosh of releasing air. Next, I moved the lever forward to open her cylinder cocks. I flipped the small lever for the automatic steam operated bell ringer and reached over my head for the whistle lever. Two short blasts and I put my hand on the throttle.

Just prior to taking my seat, I'd mounted my video camera on a small tripod behind David on the



Alco 93 pulls a caboose over the tracks of the Nevada Northern Railroad.

tender. And right before I eased the throttle back, I turned to the camera and said, "Dad, this is for you".

I pulled the throttle back a notch. Then another. One more and I heard the steam chest fill and NNRy No. 93 eased slowly and effortlessly forward. Our journey had begun.

Kurt told me the speed limit on our seven mile trip to Keystone was 12 miles per hour over most of the route, so I notched the throttle further out to pick up speed.

I quickly learned that sitting in the right seat of a steam locomotive requires almost constant concentration. Above me to my right was a cluster of five gauges: boiler pressure, independent and automatic air brake pressure, steam chest pressure, and a speedometer. I found it necessary to monitor these gauges continually. I was also responsible for watching the track

ahead. There are several crossings on the way to Keystone, all requiring bell and whistle warnings. When rounding a left turn, my vision was obstructed by the boiler, so I'd call to David "clear crossing"? or "clear curve"? in order to get his assurance that nothing and no one was on the track ahead.

Additionally, Kurt taught me to anticipate gradations in the track level. Activating the controls of a locomotive produces a somewhat delayed response. To maintain a constant speed while climbing a grade, more throttle should be applied just before the incline. Similarly, power on a downhill slope should be adjusted before the actual decline. Throttle and brakes should be applied gently to prevent the drivers slipping or locking. Kurt also taught me to listen to the engine, to the exhaust, consisting of a series of four distinct "barks" issuing from her stack as we climbed a grade—a good way to tell if the reverse lever is allowing the proper steam cutoff to the cylinders.

The seven miles out to Keystone is generally uphill, so I used the engine brakes to slow to eight miles per hour through the two tunnels through which we passed. Tunnel One is my favorite—it's longer, and in its confines the greatest aromas on Earth floated into the cab: smoke and steam. The tunnel is a delight for the ears as well; the clang of the bell bouncing off the walls and the chuffing of exhaust from the blast pipe into the stack.

The outbound incline kept David pretty busy. Ninety Three uses plenty of steam on the way to Keystone, so David was stoking for much of the time. Behind me I heard the scrape of the shovel on the tender floor and the hiss of steam as David stomped on the firebox door pedal.

In about half an hour, we'd arrived at Keystone and Kurt took over to maneuver the engine about the wye. I left the footplate at this point to take pictures and video, and to watch Richard unlock and throw the switches which would align us properly for the ride back to Ely.

The ride home was a little

tougher to handle; while I used the throttle most of the way to Keystone, the slow decline in track elevation necessitated a lot of braking—which is not nearly as easy as I'd thought. Again, a lot of it is done by anticipating the trackage ahead and by feeling the engine as she rolls. I had the reverse lever in the full forward position to provide us with dynamic braking, but I still had my left hand constantly on the brake lever. It takes an adroit touch to maintain a constant speed, moving the lever into the slow application position, maybe resting in "lap," perhaps adding a touch more pressure, then releasing the brakes and returning to "run." Stopping the engine is also an art. Just as in driving a car, it's easy to stop with a final lurch but it takes practice to release the brakes just right in order to glide to a smooth halt.

David had a more relaxing time on the way back since we weren't using nearly as much steam, and he was kind enough to man my cameras to record me operating this magnificent machine.

We were back at the East Ely yard limit way too soon, and Kurt took us on from there back to the station. As we approached the platform, a crowd of sightseers was boarding the string of passenger cars, obviously excited about their upcoming trip and the sights and sounds of the approaching steam locomotive. I couldn't resist standing in the doorway, waving as we passed them. How could they know that I was just a "guest engineer?" I could not have been more proud.

As Kurt finished coupling up to the passenger train for the excursion, Joan Bassett came to greet me with my Certificate of Operation, stating that on May 22, 2005, I had "operated NNRy Steam Locomotive 93, an ALCO 2-8-0 built in 1909 on the mainline from East Ely to Keystone Nevada and return." It was signed by Executive Director Mark Bassett and my engineer, Kurt.

Joan also gave me a copy of my train orders for the day.

I had those documents framed, along with pictures of my hand on the throttle, a beauty shot of The 93 and three small pieces of coal I'd

Continued on page 6

You may bring this ballot to the November 11 membership meeting or mail it to Perry McCully, 208 La Crescenta, Goodyear, AZ 85338-1422 for delivery by November 10.



Maricopa Live Steamers Railroad Heritage Preservation Society Ballot for the Election of 2007 Officers and Board Members

Regular and spousal members in good standing are eligible to vote.

For President:

Jim Manley YES . . . NO

Write In Name: _____

For Vice President:

Bill Meyers YES . . . NO

Write In Name: _____

For Treasurer:

Bob Douglas YES . . . NO

Write In Name: _____

For Secretary:

Stephanie Marks YES . . . NO

Write In Name: _____

For the Board of Directors: (VOTE FOR NO MORE THAN THREE)

Ken Bain YES

Charles Downs YES

Cliff Fought YES

Jim Manley YES

Stephanie Marks YES

Pieter Pennarts YES

Write In Name: _____

Write In Name: _____

Write In Name: _____

Print your name: _____

Sign your name: _____

Steamed up over steam

Continued from page 4

helped myself to before I climbed down from the cab. (Mark, I owe you nine cents.)

I stood track side as the excursion pulled out, watching The 93 pull a train of eager passengers out of the yard, not quite believing what I'd experienced during the past five hours. I've been told that when we look back on our lives, we remember our experiences most poignantly as "moments." Here are moments from that day that will live in my heart and soul forever: Kurt stopping the engine at the yard limit, getting up from his seat, smiling at me and saying: "She's yours." Leaning out the cab window with my hand on the throttle, watching the drivers rolling, the rods sliding and thinking, "I am making that happen." Locking my arms in the handrails of the engine ladder behind David, in awe of the absolute power of steam during a boiler blow-down. And maybe the most emotional moment of the day: Coming out of tunnel No.1, the track

curves close to Route 50. Ahead I saw a car parked by the side of the road. A mother, father and little boy had heard the engine approaching and stopped to watch her pass. Dad had a video camera. As we passed, they waved. I waved back. I'd spent 48 years of my life, both with my father and alone after his passing standing on the sides of roads, watching locomotives thunder past. And by God, now it was me waving from cab. I was the engineer of a steam locomotive. Life had come full circle. And most assuredly magical.

Should the Chief Boiler Inspector be a member of the Board of Directors?

At the October 14 Board of Directors Meeting, a proposal was made to make the Chief Boiler Inspector a member of the Board of Directors.

According to the bylaws, changes or revisions to the bylaws shall be presented at a lawfully held a general membership meeting and adopted by a majority of

the votes cast by members present at the next general membership meeting. Notification of such proposed action shall be published in an official MLS publication prior to final action being taken.

A vote will be taken at the November 11 membership meeting to amend Article IV, Section 3(B) to read as follows. The proposed amendment is in bold *italic type*.

"B. The Superintendents will be appointed by the executive committee. The elected officers will constitute an executive committee, which will appoint the following superintendents to the Board of Directors:

- a. Construction
- b. Operations (rolling stock)
- c. Track (Maintenance of Way)
- d. Signal
- e. Chief Boiler Inspector**

These appointments will be submitted for approval by majority vote at a general membership meeting."



STACK TALK

is the official newsletter of the
 Maricopa Live Steamers
 Railroad Heritage
 Preservation Society
 Editorial Office:
 3142 N 62nd Street
 Scottsdale AZ 85251
 Editor: Charles Downs
 602-326-4867
 mls@wellhealedmac.com
 We welcome your comments,
 suggestions and submissions.

MLS CALENDAR

Saturday, November 11
 9 a.m. board meeting
 10 a.m. membership meeting
 and election of 2007 officers
 and board members