

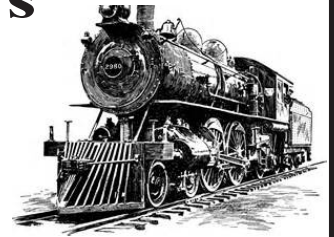


Maricopa Live Steamers

STACK TALK

January 2017

The official newsletter of the Adobe Mountain Railroad in Phoenix, Arizona, Operated by the Maricopa Live Steamers Railroad Heritage Preservation Society.



Happy New Year to you all !

2016 has been a very busy year as if the past years have not been busy. Holiday Lights was a great success. We have exceeded last years numbers. We transported over 11,000 plus people. Last year was over 9,000 plus. This deserves a big *thank you* to all that helped get the park ready for the holidays. A big thank you also to all the train crews, maintenance for keeping the railroad going and all the support teams that kept everyone happy during the Holiday Lights.

Linda Houk is involved with Arizona Veterans Standdown Alliance. I think this would be a good way to give back to our community and our military veterans. Please read the flyer in this news letter.

Winterfest (operational meet) is Jan. 18, 19, 20, & 21st. You must pre-register by Jan 1st. This could be late for some of you. Sorry for that.

Jim Ashcraft has been in and out of the hospital for over two months now. He is in North Mountain Medical and Rehabilitation Center 9155 N. 3rd street Phoenix, AZ 85020. He has a tracheal intubation so he can't talk. I have visited him and he seems to be in good spirites. He needs to get his strength back to get out of rehab. He can have visitors or send him a card. He has no relatives in the valley. By the way he has a 2 1/2 inch switcher for sale. It only has 24 hours on it and he could use the money. Call Perry 623-695-1477 if you are interested. The pictures are on our web site. An engineer car, a flat car and a gondola are for sale also.

We still have problems with speed on our railroad. **5 M.P.H whether you are running your own equipment or running club equipment.** Please adhere to this rule. You are putting more wear and stress on the track when you exceed the speed limit. There are only three people that work on keeping the track repaired and it is a full time job. The track crew only gets one day off a week. SLOW DOWN!!!!

I know this will cause a big stir , but I will miss the first meeting of the year. I have been planning a trip to Colfax Ca. to see my grandsons for some time now. Sorry about that. Hopefully Pete Pennarts will keep everything under control until I get back.
Safety first is your main job at the park.

Best regards, (as Ken Bains would say)

Perry



**2017
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Sandy Rauperstrauch
Stack Talk Editor

HOLIDAY LIGHTS

from Hank Gallo

I would like to thank the membership for allowing the Lighting Committee to build my crazy idea for a Megatree. And a big thank you to all helped build the tree, twice (because of storm damage). It turned out better than I imagined it would. I know we got a lot of buzz from visitors who told friends and then came back with them to see it all again!



Remember, there are no plans for a project like this. You pick a plan and adapt on the way. The Falcon F16V2 controller and the seven 30 amp 12volt power supplies performed perfectly through rain and lighting. Dakota loaned us his 4 foot tall speaker tower and Mike G loaned us his power amplifier, as Fred G did last year for the walkway.

The Mega Tree was the highlight of the December 2016 Christmas train rides.



Although the wind damaged the north pole, It was quickly repaired the next day and was ready for showtime.



Photos from Mike L

Mother Nature strikes again! More storm damage December 17 rearranging the Christmas Decor

On Saturday Dec. 17th Santa received a phone call from the North Pole. It appears that sometime on Friday late evening the North Pole area experienced very strong winds with a bunch of rain. Santa immediately got in his sleigh and visited the MLS North Pole area. To his surprise one of his best tents was laying flat on the ground and several of his helpers were also on the ground. He immediately called in helpers to reconstruct the area so that the Saturday night run would be on time.

So a big thank you to all my helpers. Also we had plenty of snow for the evening train runs.

Mike Lewandowski

Holiday Lights continued

As you should all realize as we close our tenth year of Holiday Lights, it is growing every year. From our first single night, where we had 250 visitors to now where over 1,500 guests/night is the norm. I want to thank Mike Lewandowski for all his efforts over the years leading the teams. Mike is stepping back to a minor role, so we need a new leader or two. We also really NEED to have more volunteers to set up the lights, as well as packing them away. Please get involved and join the Lighting Committee. They begin meeting in January to plan the show and all the steps leading up to it. Get involved to help take the show in new directions. How will we top the Megatree? Holiday Lights is providing a large portion of our operating funds, which as we move forward into 2017 and beyond, is where our budget needs will increase and we try not to raise dues. Bringing more income from events like this helps hold the dues from increasing. In the 10 days this year (with 2 partial nights due to rain), we still broke attendance and donation records from last year.



Photo by Hank G.

LINE QUEUE:

A few of us moved dozens of blue barrels to the tower parking lot on Saturday 12/17/16, which hid a large portion of the line from the public entering the lot. We had reports of waits up to an hour and only 1 complaint was noted. Carrie and her family noted on the Adobe Western Facebook page that they waited an hour in line only to find out about our baby policy. She didn't listen to us explain the baby swap policy so her husband didn't get to ride. I met them at 5 pm on Sunday Dec 18th and took them as my personal guests on a grand tour of the railroad with their son, 3 year old Wyatt driving the Chessie the entire trip. I lit the Megatree so it ran during our ride. On the way back I took them inside the Megatree for a personal up close view of the show. I showed them the new policy signs John and I had made and put in place already. They were very, very happy and thanked me several times. Grandma and the baby were happy to go along as well.

HOT CHOCOLATE:

Judy and Mike's Hot Chocolate stand was a huge hit and was very profitable. They are looking to expand it for next year and we NEED help. I appreciate Judy stepping up and volunteering to run it. If we had a couple more members we could give away popcorn as well, since we already have the big air pop machine from last year. There is no cleanup, just dump one cup of kernels in the popper and hit "start".



PAYPAL:

Bob, Donna, Dennis and I were able to have Paypal active for our second weekend of Holiday Lights and it was a huge surprise to many members on how well we did with it. We should end December with over \$1,000 in additional income we wouldn't have had since those guests did not have ANY cash to donate. That \$1,000 would have walked out of the park and our cost to process was 2.2%, or just \$22.

Behind the scenes of the Holiday Lights

SECURITY PATROL:

Dakota patrolled the park during the busiest nights to control some of the "out of control" children. He took some garbage bags and picked up several empty bottles of different libations from around the park.

TRAFFIC CONTROL:

Phoenix Police Officer Kevin was controlling the light at 43rd Ave for traffic entering the park as well as when they were exiting. We never saw traffic problems as we had in previous years. He was there on Dec 16, 17 & 23 from 6 until 9 pm. We gave his family a special tour on Saturday night.

After I spent several days contacting different departments for permission, PO Kevin was assigned to us at a cost to the club of \$60/hour which had been approved by the board.



Photo Hank G

Special Conductor!



Photo Mick J

"Santa, we just love trains!"



Many happy smiles!



OPERATIONS:

Mike and Fred were very busy over the summer (as much as you can be in 110 degree heat) to prepare the new riding cars (we added a sixth train as well for Holiday Lights). Several members helped out with car inspections and repairs to cars and locos to have the club fleet of 7 locos running for Sundays and then "the show". A tribute to the maintenance program Fred and Mike run; on the club equipment, we had one draw bar come loose and Fred had it fixed in 15 minutes and back in service. For the final night BNSF 2001 had to be red tagged for worn out truck springs. Joe and the guys figured it out and it will be back in service soon.

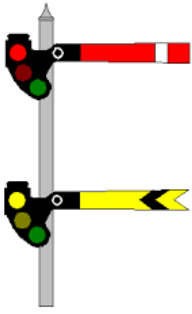
Please don't forget we still need volunteers on Sundays, especially after 2:30pm when crews began to leave for the day. Each crew should inspect the train they are using when they start their shift (no matter what time of day). Ensure fuel and oil are up to level and speedometer and conductor alarm are functioning. The last crew on each train must return and plug in their GPS and alarm to the freight shed AND PUT YOUR TRAIN AND LOCO BACK IN THE SHED. At the last Holiday Lights Show (and many others) either I was the last one out after finding almost all the equipment left out, or a few hardy souls were with me putting away equipment in the pouring rain. Joe was out turning off lights and we were wet and cold but this expensive CLUB equipment cannot be left out. Any vandalism will come out of the club budget.

Junior Engineer School:

John's back has been giving him trouble, so I have been handling Jr Engineer School as much as I can. But after working on the Megatree and walkway light show each night and handling other issues, I just didn't always have the energy to put in a full effort on "school". It is more popular during Holiday Lights than on Sundays. I had to limit it to one family at a time, otherwise I had guests wandering around the freight yard.

Thanks for all your support
hank

Someone loaned Bob Rauperstrauch a flashlight back in the summer when he was working on his steam locomotive. Call and describe it, and he will gladly return it. Bob at 480 753-9690.



Tower Signals Update

Greg Gorman

We have been busy making the computer system in the tower more reliable and flexible, as well as implementing ways to let you know what it's thinking!

First, we added two small red lights on the fascia board on the west side of the tower. You can see them from the station and the engine lead as you are waiting to depart. One is labeled "N" and the other "S". These lights show you when the pushbuttons are locked on the North and South complexes. When lit, the computer will not let you select a route on that side of the layout. As you know, we can do parallel operations so there may be cases where the "S" is lit (because someone is coming inbound) but the computer will allow you to select an outbound route on the North Complex. In any case, I hope the lights reduce your frustration with the computer while it's busy keeping our trains safe!

Second, we have implemented time-outs for every route going in and out. We've noticed over time that when someone does an "unexpected" operation – like selecting Bobberg on the push buttons but then manually throwing switches and going out Werner – the computer gets lost because it was expecting you to cross certain train detection areas and you did not. This is also true coming inbound, if you came in FarFlung and then manually threw switches to go down the Engine Lead to the yard it would also then be 'stuck' waiting for you to cross the train detectors past the tower. The timers are set for 90 seconds on average. We are 'tweaking' them as we see how the operations go. For example, Werner Inbound is now 120 seconds since it's a long way around from when the computer sees you until you clear the tower. Arntchoo is only about 45 seconds since it's a lot shorter from the Signal Bridge to clear the tower. We'll keep adjusting as we go.

What this means then, is that once you select a route you need to get going! If you're going to sit in the station and talk with friends, the route will time out and you'll get a red light and have to re-select your destination again. Same is true coming inbound, if you're given a green light but then stop & chat, the route will be removed.

This does not compromise safety in any way. If the route is cleared while you're in a block (like in front of the tower chatting with someone), your presence in the block will keep anyone else from selecting a route and throwing the switches under you. Finally, we have implemented "lockout" controls on the computer to electronically close routes. If a route is marked "CLOSED" on the route board, the dispatchers can easily disable all the pushbuttons to prevent anyone from selecting those routes.

I hope with these changes we make the system even more stable, reliable and less maddening for you! As always, your comments and suggestions are welcome!

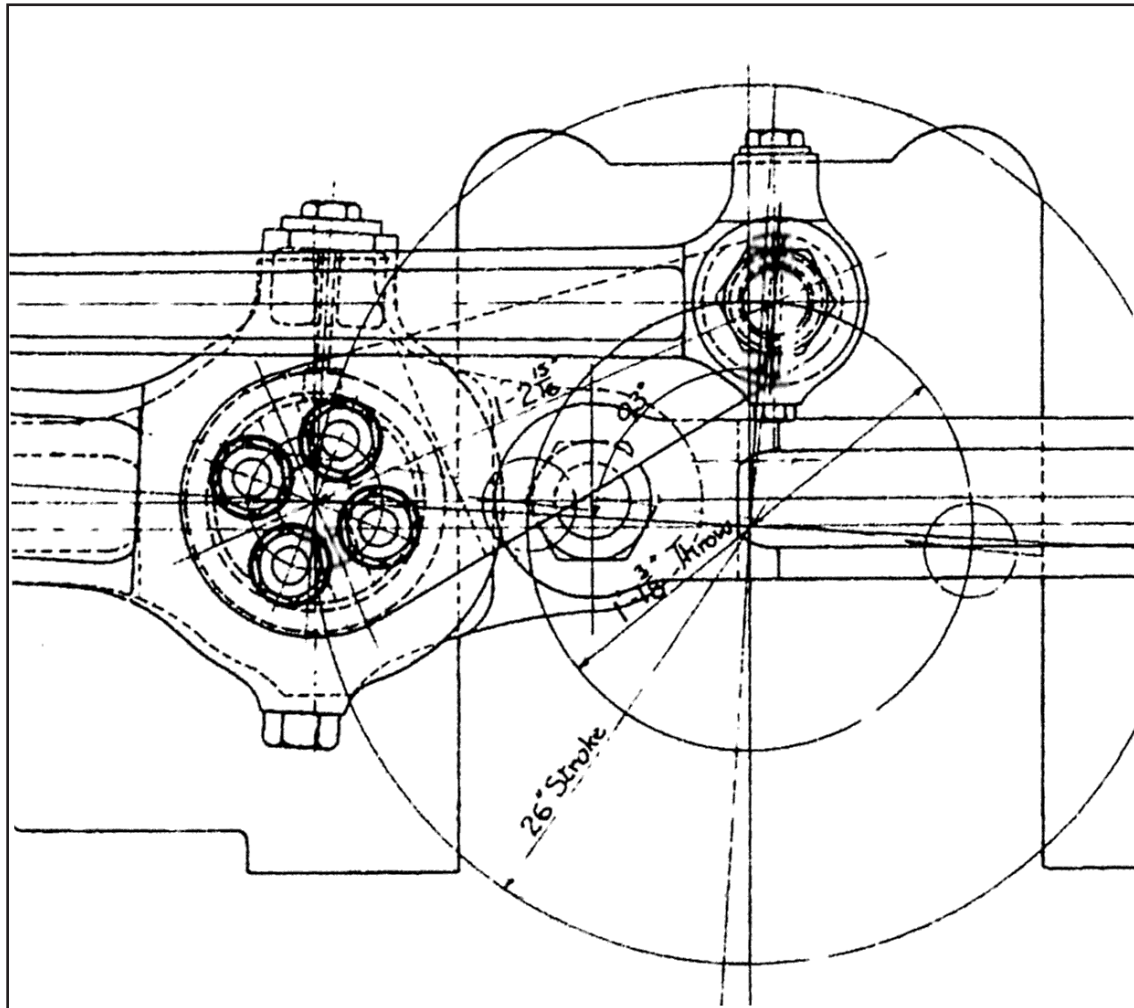
Greg

STEAM LOCOMOTIVES

VALVE GEAR

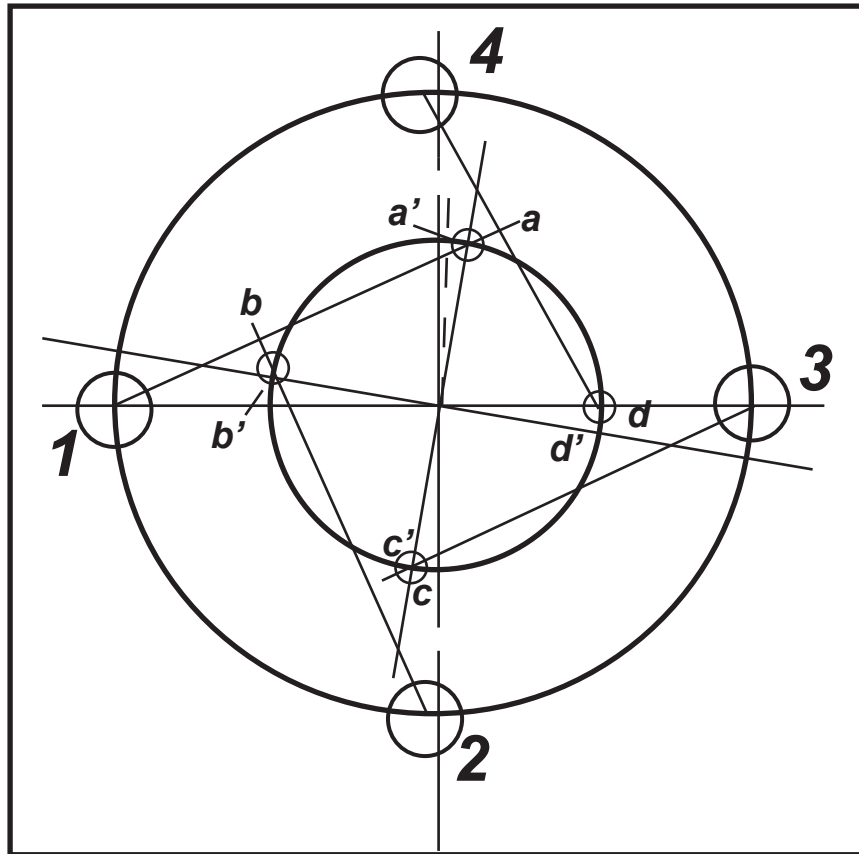
From Dave Griner

Hello again. This time we'll look at some more aspects of the Walschaert gear, in particular , the return crank and its position relative to the piston dead centers.



The drawing above shows the main crankpin with the return crank secured in its proper position to the outside end on the crankpin. Notice that the center line (here's another mention of center lines) does not fall exactly on the center line of the axle.

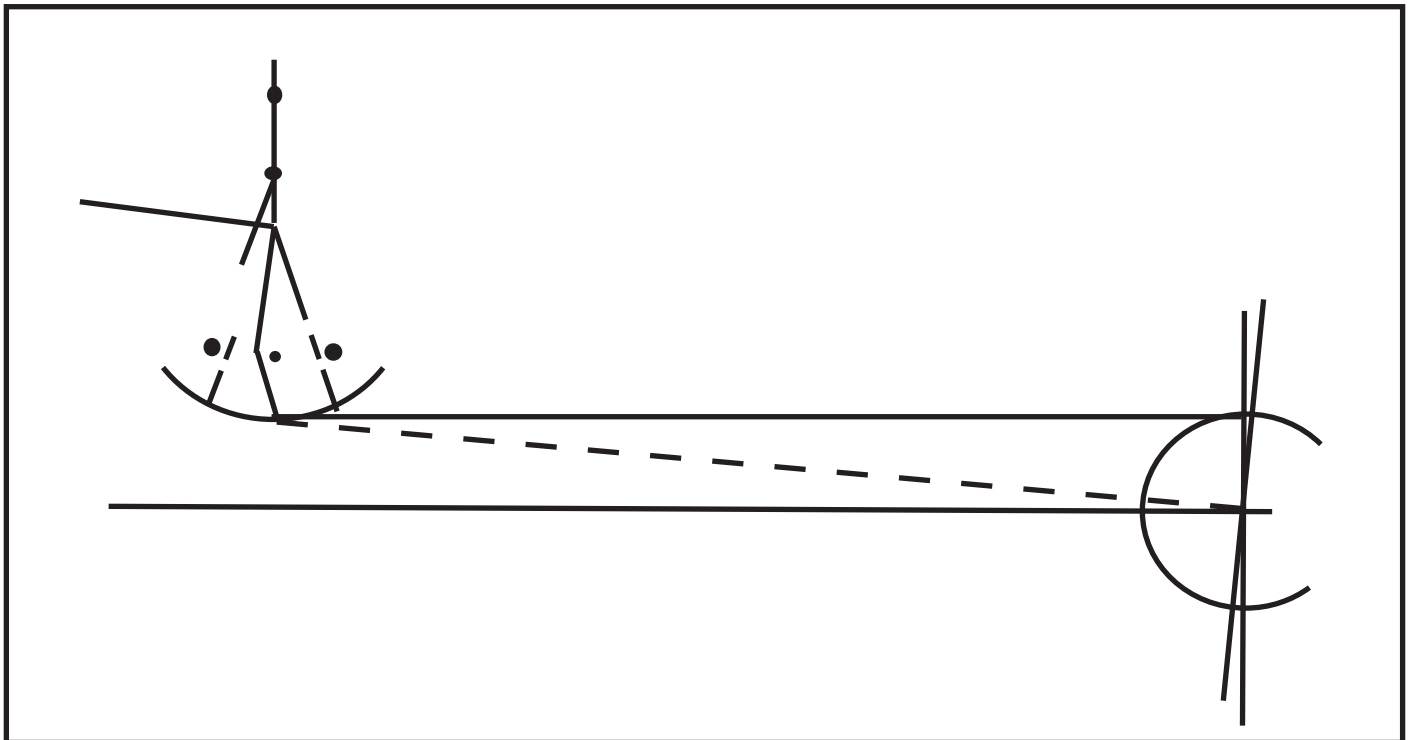
This drawing shows the relative positions of the crankpin (large circle) and return crankpin (small circle) with regard to the front and back piston dead centers (1 & 3) along with the top and bottom quarters (2 & 4).



A description of the situation from Don Ashton:

There are small inherent timing errors at the return crank, which is normally set at the dead centers such that the tailpin (on the bottom of the expansion link) of the expansion link assumes the same position on both centers. That automatically means that a variable error exists at all other points by the transmission of rotary to linear motion. The error increases with pitch circle diameter increase, calling for the least that will provide sufficient travel to the valve. Greater pitch circles and expansion link swings are demanded by the use of inside admission and designers of more modern locomotives require skill and ingenuity to avoid poor steam distribution. Symmetrical layouts for short travel outside admission valves reduce the problems dramatically irrespective of scale. The correct angular setting for the return crank has the pins at 90° to a line passing from the tailpin to the axle center. It may be noted that the return crank pin is the only one in the gear that revolves through 360° , hence the common use of a roller bearing, which is inappropriate for all the other pins.

It is not difficult to conclude that the detailed design of Walschaerts' gear is more complex than that of Stephenson's gear, which has the advantage of combining the two components directly at the eccentric setting and merely requires that nothing in the subsequent chain of the mechanism should disturb its propensities. Mechanically, its greatest disadvantage is that of having to lift the whole mechanism in order to reverse the motion or to achieve intermediate expansion working. Walschaerts' gear readily satisfies this condition since only the raising of the radius rod is involved.



Locating the proper position of the return crank on the main crankpin is a matter of blocking the link perpendicular to the radius rod (i.e. vertically), then with the radius rod installed rotating the return crank until the radius rod can move from top to bottom in the link without imparting any motion to the valve stem on each dead center of the piston.

Betch'a that was clear as mud..... eh?

Well that's enough jibberish for this time.

On a personal note, I would like to thank Perry for his unfailing efforts to keep our trash cans empty, it is a job well deserving of notice and appreciation.....

Thank you, Sir!!

Happy New Year !!

Dave

Maintenance of Way Superintendent
Joe Schnyder

As we start to rebuild the West Werner branch, I would like to thank all the help down at the saw mill who are cutting and drilling ties and making panels to keep our maintenance project going. This is going to require a lot of ties and labor and a few have stepped up and said, "*I am willing to help rebuild OUR RAILROAD*". Bob Douglas, Dave Kulman, and I have had help in digging out the old track and installing the new panels and then getting them leveled, tamped, and re-ballasted. We still appreciate all the labor help we are getting and even the signal guy has stepped in and helped put together track panels, but don't tell the union that - they will file a claim for lost wages (peanuts). Thanks Terry. We still have a long way to go as we are at Little Bug now and hope to have it open to Reynolds by the Operations meet, but nothing past that is passable.

Please remember, we are working out there and that red sign on the right as you go toward West Werner means TRACK OUT OF SERVICE. You will encounter a long stretch of newly restored track and then come around a corner and there is no track there at all. Remember the red signs are for track impassable.

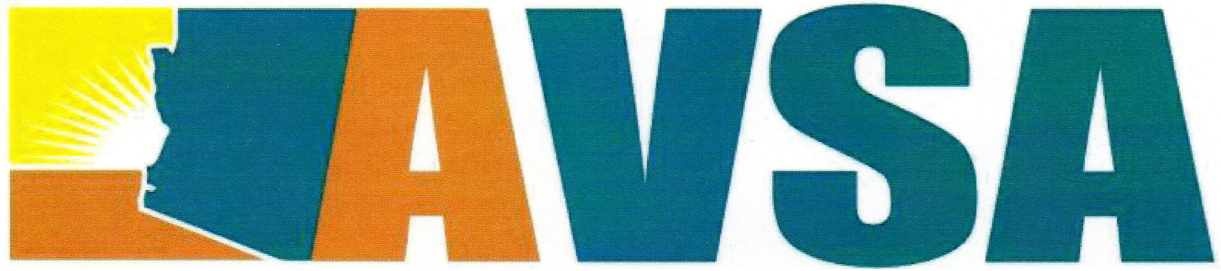
Also keep in mind, after heavy rains the Arntchoo branch past Winchester is below ground level and sometimes the mud is on top of the rails but the track did not wash out, so you might need to take a shovel and clean the top of the rails off after heavy rains. We went out and it took about 15 minutes to clean all the mud off the rails and it was just fine to pass.

I must hand out a special thank you to Bob Alkire who is running the saw mill and keeping Griner and Fego and some others that help in line. Many thanks to Dave and Joe and the new help for building all the panels and keeping us in ties to keep heading west. Thank you guys. Now GET BACK TO WORK.

All kidding aside, it is the work of many that make this thing as big and fun as it is. Just look at the people who come here just to see what we have done to make the railroad bigger and better.

I would like to thank all who help, especially the hard work of that shovel - Scott and Daniel, thanks. I was trying to figure out how many tons of ballast you two have moved for the track rehab but then I realized if you knew that, your back would probably start hurting, so I stopped that idea. Bring a shovel we will have a good time.

Joe Schnyder



ARIZONA VETERANS STANDDOWN ALLIANCE

■ Coordinated by the Arizona Coalition to end Homelessness ■

The Maricopa County Standdown
Feb. 9- 21, 2017
Arizona Veterans Memorial Coliseum

The ***Maricopa County StandDown*** is Arizona's largest outreach event targeting veterans experiencing or at-risk of homelessness. The StandDown is held each year in the spring at the Veterans' Memorial Coliseum and spans 3 days and 2 nights where homeless and at-risk veterans are offered shelter beds and other basic needs items such as meals clothing, shoes, hygiene products and shower facilities. In addition, over 70 service providers come together to deliver on-site support during the event; all committed to "cutting the red tape" to deliver their services quickly, efficiently and in a veteran-centered framework.

Last year 1,850 veterans were served, 207 of who were woman.

HOW CAN YOU HELP?

Purchase: Men's and women's medium size athletic socks, underwear, boots, and gently used jeans. Lindy will provide a box at the clubhouse.

Volunteer: February 9 or 10, 2017 as a Guest Guide assisting vets to the services they need. Let's get an MLS Team together.

For more info: Lindy Houk - houklinda@yahoo.com

<http://www.arizonastanddown.org/>

To all Maricopa Live Steamers Members

We are now able to earmark your **Fry's Food Store Reward** card to benefit our club with your shopping at Fry's at no cost to you. Fry's Food stores are giving out \$500,000 per. quarter and we want to get our share of this Jackpot!!

Please follow the following instructions to make MLS your favorite group.

***** You need to resubmit this information every year in September ***
for the Fry's donation to continue in effect.**

Dear Maricopa Live Steamers Organization 25549,
Congratulations, **you are now enrolled into the Fry's Community Rewards Program.**

Your participants may begin enrolling online 48 hours after receipt of this email. Just go to the appropriate website mentioned below to enroll.

PLEASE NOTE: Before you can link your Fry's V.I.P card to an organization, you must have an email address.

STEP 1: Creating an Online Fry's Account

****NOTE: If you already have an online Fry's account, skip to #2**

*Go to <http://www.frysfood.com/>

*Select 'Register'.

*Under Sign-In information, enter your email and create a password. (Write down your email & password—will need it in step 2)

*Select 'Use Card Number'.

*Enter your Fry's V.I.P Card Number, last name and postal code.

*Under 'Select Your Preferred Store' enter your postal code.

*Select 'Find Stores'.

*Choose your store then select 'Create Account'.

*You will then be prompted to check your email for a confirmation email.

Click the hyperlink in your email to finish creating your Online Fry's Account.

*Continue to step #2 to register for the Fry's Community Rewards Program of your choice.

STEP 2: Register for the Fry's Community Rewards Program

*Go to <https://www.frysfood.com/topic/community?activePage=community-rewards-2>

*Select 'Sign-In'.

*Enter your email and password then select 'sign in'. (This will be the email and password you created in step 1)

*Select 'My Account then select 'Account Settings' from drop down menu.

*Click 'edit' under Community Rewards. If prompted, enter personal information.

*Under Find Your Organization: Enter the NPO number or name of organization then select 'search'. (You can get the NPO number from your organization)

Our Organization is Maricopa Live Steamers Our NPO number is 25549

*Under Select Your Organization: Select box next to your organization

*Then select 'save changes'.

*If you have registered correctly, you should now see your organization information listed under 'Community Rewards' on your Account Summary page.

A few minutes of your time to fill out this easy form adds \$\$ to MLS' operating budget.

Thanks!

Coming Up!

Winterfest

MLS Operational Meet coming up January 18th - 21st, 2017



Cars are filling every track in the main yard.



Photos from last years event by Jim Z.



A lot of time and effort goes into making up the consists, and their routing cards to make this a fun and sometimes frustrating event just like a real railroad. **Thank You** to all of you who put this event together.

So, for those of you who haven't been to an OPS Meet yet, here's what's coming up. Last year was my first year to attend one. It sounded simple enough. Just go play like a real railroad, how hard could that be...? Whew! First they give you a map of a spaghetti bowl (track plan) and a schematic straight line diagram of the same spaghetti bowl. Then they point to a consist in the yard, hand you a stack of cards and say "Lunch is at noon..." Fortunately for me, my assigned crew had done this for many years and in fact, had memorized the entire spaghetti bowl including almost ALL the sidings. Good thing too, 'cause the real fun was about to start!

It was just like railroading in a smaller scale, except you don't get to pick up the cars to move them around that string of reefers blocking your industry's spur track. And that thing about "facing and trailing point switches" takes on a WHOLE new meaning when the runaround track is a quarter mile away from the industry's spur track. If some stranger offers to block out your consist in the yard for your run, take the offer and buy him lunch! That's a favor you will be hard pressed to payback. Because out in the weeds and sagebrush, that blocking is priceless! Oh, and then some bright light thought it would be most realistic if periodically a FAST passenger train would charge by on a tight schedule, right when you have your train split on the main line and run around track. That'll teach you to read the operating schedule with a close eye. By the way, that darn operating schedule reads BOTH up and down. just like the real ones... If that sounds like fun to you, you're right, it's a blast! And you only get to do it once a year at MLS. If you aren't on board this year, make sure to sign up next year. Don't miss the fun.

Bob Rauperstrauch