

Message from John Bergt

I hope everyone had a happy and healthy Thanksgiving Holiday, and I wish you all a pleasant upcoming holiday season. Can you believe that another year has flown by? It seems like just yesterday that I wrote my first Stack Talk article. We had just come off another record breaking holiday lights run season, and based on this past weekend, we are on track to break records yet again. The unofficial numbers are 845 for Friday, and 780 for Saturday. For comparison, last year we had 516 and 606 respectively. Mr. Douglas will be keeping an updated total on the whiteboard in the club house.

I can't even begin to explain how thankful I am to all the members who have volunteered their time to the holiday lights train rides. The planning for this year's event started at the beginning of the year, and the Christmas committee met throughout the year, working through plans to make this year's event bigger than ever. They had tons of help from all our hard-working members who started putting up decorations in October before the fall meet, and throughout November. A lot of thanks is owed to Joe Schnyder, David Kulman, Mike Lewandowski, Mike Grant, Hank Gallo, Fred Young, Donna Holm, and many, many others. I apologize if I don't have all the names.

I had an opportunity to engineer a train on Friday evening, and for the entire ride, a 5 or 6-year-old boy named Alex, who was sitting in the first riding car, shared his excitement with his dad, pointing out all the aspects of the park, celebrating each bridge, and each area of lighting. That kind of response makes all the work worth it. This family will not only be back, but will also be telling their friends about their great experience. This is the best kind of publicity we can get. Our Facebook page has also had lots of traffic, and many of the comments on our posts are people telling other people about the rides, and making plans to attend.

This year we debuted the "Mega Tree", a 40-foot-tall LED lit tree just south of Waterworks and the Flugelhorn Factory. This tree can be seen from Pinnacle Peak Road by people driving by, and it is a great beacon for the park. Hank Gallo, Fred Young, Timothy Freeman, and more spent a lot of time programming the sequences of lights to go along with the music, and Hank promised me he will keep working on the lights, tweaking them to be even more spectacular. We have received lots of great feedback in the station about the Mega Tree. A lot of design and engineering went into the installation of the Mega Tree, and it should have stood up to anything mother nature could throw at it.



Alas, mother nature has a sense of humor, and on Sunday evening, during a spell of rain and wind that came through Phoenix, mother nature swatted our Mega Tree to the ground. To add a little insult to injury, she had it fall right onto the generator that had been providing power to it on Friday and Saturday evenings.

I got the first notification around 9:50 AM on Monday morning. By the time I was able to get out to the park at 2:30 PM, the LED strips had already been bagged up and secured, the old pole moved to the side, the portion of the base ring that had been mangled was put aside, and a new pole was on the way to the park, thanks to the efforts of Pete Pennarts and Cliff Fought. Mike Grant was finishing welding up 4-foot-long ground anchors for guy wires, and Dave Kulman was busy drilling holes in the ground with the auger on the back of our tractor. Hopefully, the tree will be re-erected by this weekend, and the lights will all be working again.



After the storm, there was no more tree....



This is my last article in the Stack Talk as the president of MLS. It has been a very educational experience. I have been involved with the leadership of the club for several years now, but I had no idea how much work and attention to detail is required to lead the club. I am honored to have been the president, and I encourage every single one of you to explore a leadership role within the club. After all, this is YOUR club, and the leadership is here to serve the members. This past year saw some needed changes to the club by-laws and operating procedures, as well as three successful meets, that have exposed our members and guests to a large collection of motive power and rolling stock. This past fall meet saw an upswing in steam powered equipment, which I think is a great sign for our future. I saw younger club members learning to operate large steam locomotives, and that gives me hope for the future of the hobby.

I know Perry McCully will continue to lead the club into the future, and we will continue to serve our community, providing train rides on Sundays, as well as special events, like our meets and the ongoing holiday lights train rides. If you haven't been out there yet this year, I encourage you to, but remember, dress warm! I wish you all a very happy holiday season, and look forward to seeing you around the park!

John



NEW OFFICERS for 2017

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On Nov. 12th the 2017 election ballots were counted for the slate of candidates to serve for 2017. A total ballot count of 50 was received by the MLS secretary. The results were as follow:

Perry McCully - President

Pete Pennarts - Vice President

Mike Lewandowski - Secretary

Bob Douglas - Treasurer

members at large:

Mike Grant

Joe Fego

Mick Janzen

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We thank all the members that took the time to cast their vote.

Regards, Mike L.



The kids had a great time!



Mick with Santa

Track Updates

The track crew has replaced virtually all the rail on East Werner Division with steel ribbon rail for trouble free operation. Due to insurance the steamers will run with and alongside the public trains, but will only haul members (who are not working) and their families. So now the public will be able to watch them as they majestically glide along the tracks puffing steam as they go.

We're trying a new feature in the Adobe tower lot by building a larger line queue, so our guests are not standing in the parking lot. We have also added a hot chocolate stand close to the line. More LED parking lot lights have been installed as well. For the December 16, 17 & 23 we will have Phoenix Police controlling the 43rd Ave traffic light from 6 until 9pm to reduce congestion as our guests leave.



2016

**MLS CHRISTMAS PARTY
AND POTLOCK EARLY DINNER**



By Mike Lewandowski



This year our annual MLS Railroad Park Christmas Party will be held on:

Saturday, December 10th
from
3:00 PM to 5:00 PM

This timeframe was selected to ensure that our public train volunteers have enough time to enjoy dinner and party with their friends.

- * MLS Christmas Chefs (Helen and Mike L.) will prepare spicy pork loin roasts w/gravy on the side.

******* We need volunteers to set up the decorations, table setups, food serving activities, and help with cleanup. *******

- * The Potluck portion of the dinner program will allow attendees to bring food items based on your last name first letter. Of course, if you have a special food item that you have prepared in the past dinners it's OK to bring.

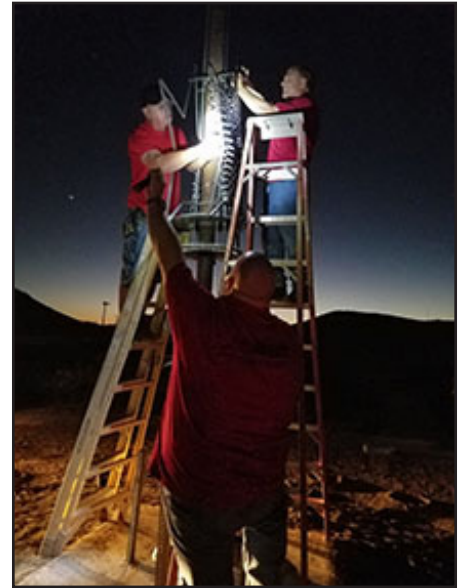
<p>First letter of <u>last name</u> A-G Appetizers</p> <p><i>Suggestions</i> Veggie trays Dip/Chips Deviled eggs</p>	<p>First letter of <u>last name</u> H-P Main Hot/Cold Dish</p> <p>Potatoe casseroles Rolls, Baked beans, Vegetables Salads</p>	<p>First letter of <u>last name</u> Q-Z Desserts</p> <p>Cookies, Pies, Ice Cream Apple Cobbler, Brownies Whipping cream</p>
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This spread of food items will ensure that we have enough variety for all to share.

**** Please contact Helen to get your name on the list.
623 - 236 - 6117 or text/email rabbitth@yahoo.com.**

Holiday Lights from Hank Gallo

Our dedicated volunteers worked so hard this year adding new features around the park for the holidays. You'll see the new Ferris wheel and carousel in the balloon loop by the station and our new, larger snow machine at the north pole. Many new lights and animations have been added as well. The most notable change is our 40' megatree located just south of Waterwerks. The Lighting committee has been working since January to make this happen, and we worked through Thanksgiving Day to make it come alive. A 55' steel pole was built (from spare parts), custom made top rings were fabricated and pulleys rigged. An 8' deep hole was dug and the "tree" planted in cement. 8,000 smart LED's were hand set in 2,600 feet of pixel strips for support. A Falcon 16v2 controller was programmed using Xlights free software to make the LED's dance to music. Three 300 watt 12 volt power supplies provide low voltage power for operation. The LED's and four singing faces that were new last year have returned to Friendship Park's exit walkway.



Before the big storm.



These two photos show the tree on Thanksgiving day including the control system at the center of the tree. Please do not go inside the perimeter of the tree, as there are many fragile wires covering the ground.



We have many members already signed up to volunteer during the Holiday Lights runs, but we can always use 1 more person - you! So please sign up. And don't forget we're still open on Sundays so we still need some Sunday crews. Interesting to note that January 1st falls on a Sunday. The last time that occurred we had planned on being closed, but a few of us decided to stop by the park in case any guests showed up. It was also the first day we were trying the new Shelby's Junior Engineers School. We had a record attendance of 700 riders that Sunday.

STEAM LOCOMOTIVES

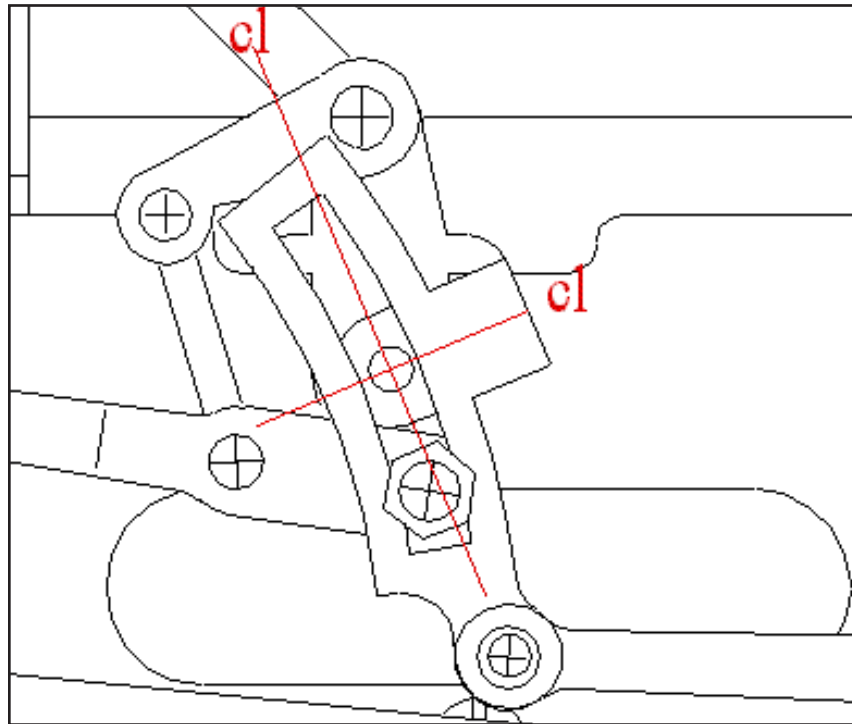
VALVE GEAR

From Dave Griner

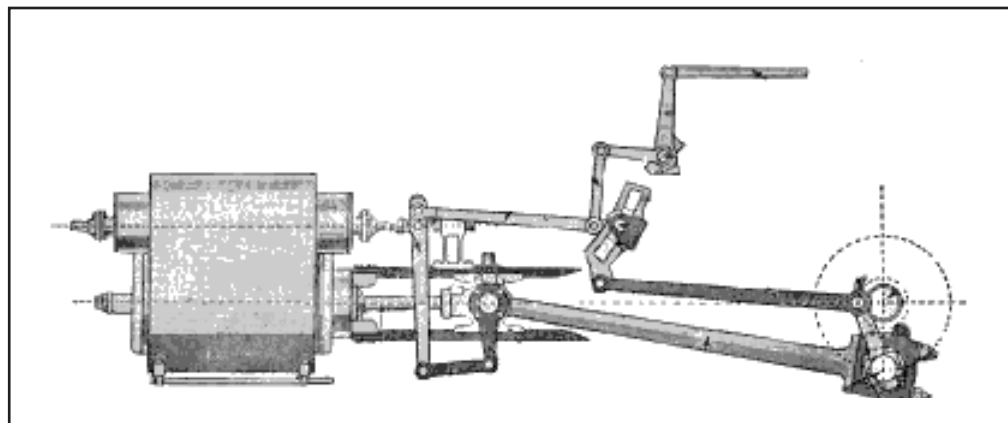
Hello again,

We'll continue with Part 4,859 of this saga, discussing a few points that warrant further detail.

The first of these is what is referred to as the "slip of the block" (which is very difficult to explain verbally), the block being located at the lowest point of the link slot in this drawing. It can be seen here where the hex nut is holding the link block to the radius rod.

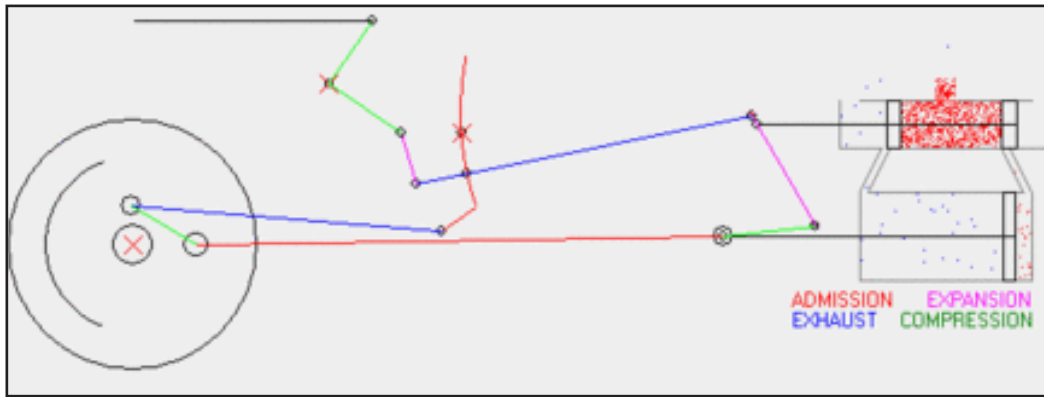


Now using both this drawing and that below, envision the link rocking back and forth, since the link block is not pinned to the link it is free to float in the slot, being held in place by the lifting arm. So, as the link imparts its movement to the radius rod, the link block must slip in the slot ever so slightly before imparting the motion. This phenomenon puts a slight error into the valve events, such that the gear is never absolutely correct, just one of the oddities of this set up. It might be added that this same error can be found in any gear employing a sliding block in the link.



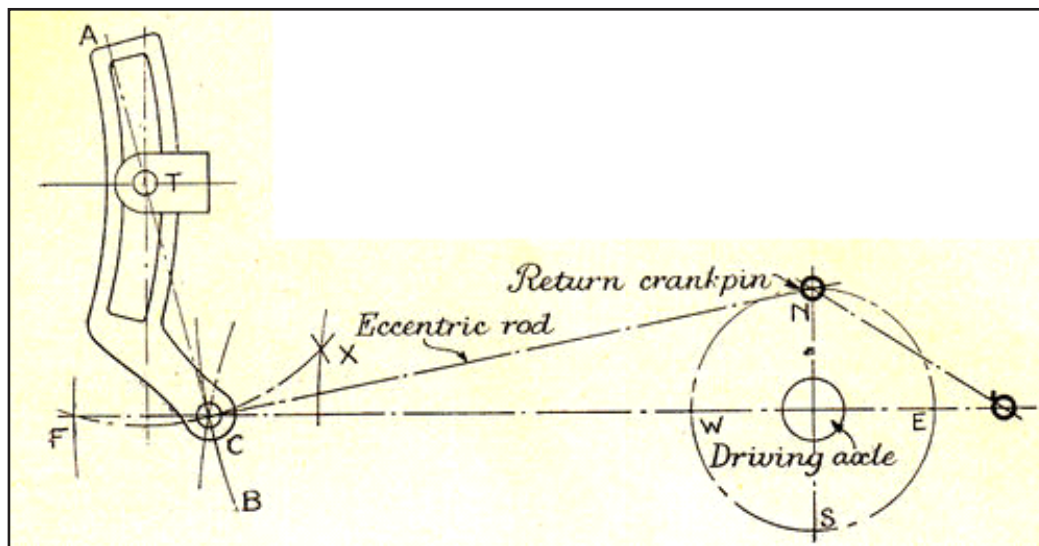
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Next is the backset of the link foot pin.

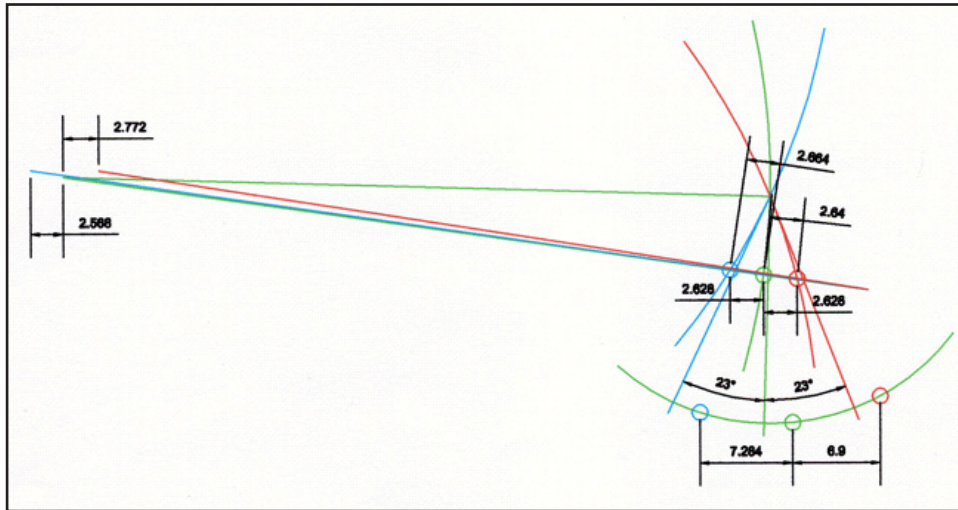


By studying the sketch above, it can be clearly seen that on the vertical center line on the link. If the eccentric rod only functioned on the axle center line the pin could be on the link center line. However, since the radius rod must impart motion at the top and bottom quarters of the eccentric crank circle, now there is an angular displacement that imparts an error that allows uneven displacement of the radius rod. Soooooooooooooo, in order to correct this, we must set the link foot pin back from the vertical center line of the link, hence the term “backset”.

Recollecting our discussion of pendulums from last time, we can see that as the link foot swings, relative to the angularity of the eccentric rod the error is corrected by the back set. Studying the drawings below will take a bit of time, but in the end it becomes clear that without the backset, this gear would never be able to function properly.



So, when we set out to design this gear, it becomes most appropriate to pay considerable attention to these points.



Next time we'll review the determination of the eccentric crank circle and positioning it relative to the piston dead centers.

Take care.

Dave

Announcement

Engineer cards from this point forward will now be sent out digitally to your email. You can request a physical copy by replying to the post-test email, or contacting Gabe Zorbas at gabazorbas@gmail.com

Amazon.com

If you're like me, you purchase a few items from Amazon. You'll notice when you log in you have the option of using Amazon Smile, which can donate to your favorite charity, which for me is MLS. It costs you nothing, but will benefit the club each quarter with a donation from Amazon. Just agree to use **smile.amazon.com** and search for **Maricopa Live Steamers** and make that your charity (we are a 501-C3 organization).

Please visit our web site and Facebook page (www.facebook.com/trainrides) for the latest photos and news.

Thanks to all our dedicated volunteers, without you none of this would be possible.

I also wanted to thank Jim Ashcraft for all his work on Stack Talk and the engineer & membership cards for as long as I can remember. It is a thankless job chasing members and Board of Directors for articles and then assembling and editing them in time to publish. While he is recuperating he has handed the jobs off to Sandy Rauperstrauch and Gabe Zorbas.

Merry Christmas and Happy Holidays
Hank

AWRR Radio Procedures

by Gabe Zorbas

Sometimes, radio communication on the railroad is “lost in translation”. This could be a potentially large and unnecessary risk to safety on the railroad. These radio procedure guidelines, based off of guidelines from a real Class 3 railroad, have been developed to assist in eliminating that problem. Please carefully read the whole document, and then give it another read.

Transmission

Before Transmitting, pause and ensure you are not interrupting a communication in process. When ready, hold down your PTT (Push-to-talk) and wait a couple seconds before speaking. This is so as to provide a sufficient amount of time for all receiving radios to be “keyed” up, so your entire transmission is heard.

The Adobe Western Railroad uses FRS 5-10 and VHF 4-24 for operations.

Give your required identification, and the identification of your intended receiver. For example:

“AW [Company] 4402 (Four-four-zero-two) to Adobe City Dispatch”

Required Communication

When identifying yourself to others over radio, you must use your proper identification.

If on a mobile unit:

State your engine’s road’s first two initials. For instance, Union Pacific would be “UP”. Never phonetically (Alpha,bravo, charlie) say the engines road name. Adobe Western engines can alternatively use the road name “company”.

After stating your road name, state your engine number, preferably by digit. For example, Union Pacific 2001 would be stated as “UP Two-zero-zero-one”

If not on a mobile unit:

State your first name or title and your location. For instance, you could say “John at Bumble Bee to Adobe Dispatch” or “Maintenance of Way at milepost four-zero-two (402) to Adobe Station Master”.

Wait for acknowledgment from the receiver before continuing your communication unless the communication is a general message (Intended for all.).

Acknowledgment

The person or crew receiving a communication should immediately respond, unless it is a general message OR doing so would be unsafe at that time. When responding to an initial transmission, the receiver should restate the transmitters identification and then their own identification. For example,

Transmitter: “SF four-one-one to the Adobe Station Master.”

Receiver: “SF four-one-one this is the Adobe Station Master, go ahead.”

Code 1 - Train stopped, general.

This code is used whenever the train is stopped for whatever reason, and not for a red signal or at a designated station. This code signifies that the train and/or crew do not require assistance. Your location should be repeated after giving a code 1.

Code 2 - Train stopped, unruly passenger.

This code indicates that a train is stopped due to an unruly passenger, and assistance is required. This code is used when an escort back to a designated station for a passenger is needed.

AWRR continued

Code 3 - Train stopped, derailment.

This code indicates that the train is stopped and derailed, and assistance is required. This code is used whenever a crew can not re-rail a piece of equipment and need more help.

Code 4 - Train stopped, mechanical.

This code indicates that the train is stopped for mechanical reasons and assistance is required.

Code 5 - Rescue needed.

This code indicates that the train is inoperable in its' current state, and the crew need a second train sent out to transfer passengers or an engine to tow in equipment.

If sensitive information needs to be communicated and can't be communicated through the codes, request the receiver to change (go to) to an unused channel. Example, "Adobe Dispatch go to 2-10"

Emergency Communication

Emergency calls should begin with "mayday" repeated three times. Emergency traffic as the highest priority, and no other communications should take place until the emergency traffic has ceased. Emergencies are only for initial reporting of collisions, storms, washouts, fires, track obstructions, property damage, or injury to members or the public.



Merry Christmas &
Happy New Year!

See you at the Christmas Party!
December 10

And let's keep the trains running in the New Year!

Hi to all MLS members,

I have been asked to fill in as newsletter editor for James Ashcraft while he is in the hospital. He has done a fabulous job keeping up with all the train events and getting that information passed on to members each month. I can't remember a Stack Talk without him at the helm. We wish him the best for his recovery.

I was editor for the Arizona Big Train Operators newsletter for four years and produced all the printed material and program for the 2008 National Garden Railroad Convention held in Chandler, AZ. In a nutshell, graphics, color and design are my background.

Bob and I have been with the club since 2000 and we are more active now that Bob's Santa Fe Pacific (#1206) is operational. I hope to meet more of you at the train park.

Please send any photos or articles to me at braup@cox.net. Remember, it's your newsletter and it's better when you contribute. There'll be glitches, but positive feedback is always welcome!

Sandy Rauperstrauch