



STACK TALK

MAY 2016

The Official News Letter of the Adobe Mountain Railroad
Phoenix Arizona, Operated by the Maricopa Live Steamers
Railroad Heritage Preservation Society,

UP-COMING MEETS

2016 FALL MEET OCT. 27,28,29,30

2017 OPS MEET JANUARY 19,20,21,22

May is here, and the run season is just about over. This Sunday (mother's day) is our last official run day. The weather forecast is looking favorable. We had just short of 400 people last Sunday, not bad for May (when it's supposed to be too hot already). Don't forget that we have our volunteer appreciation lunch on May 14 at 11:30 AM in the club house. Please be sure to thank Mike Lewandowski for his efforts in putting this on. Our volunteers are what make our railroad the great place it is. Without all of you, we could not provide the joy and entertainment to our guests from other railroads, as well as our visiting public. All of you should be proud of what you have accomplished. I want to welcome also all the new members who have joined recently. We are happy to have you join our family, and we appreciate all the ways you have been pitching in.



Last November we had an incident with a rider during the Holiday Train rides. This past Friday, MLS was notified by our insurance carrier that a claim has been filed against the railroad. This is why we have insurance; they are handling the claim. The MLS leadership is providing the information that has been requested, and is cooperating fully. I would like to

remind all members that if you are approached by individuals asking about anything besides becoming a member, to please refer them to one of the officers, or Mike Russell. Mike Russell (who has a background in insurance) is our primary contact with the insurance carrier. This process will take some time, and Mike will keep the officers and the railroad informed of its progress.

Just because we stop our public rides for the summer doesn't mean that we stop working on the railroad. Our Saturday workdays will continue, please make sure you have lots of water with you, and if you are going out to work on something by yourself, make sure someone else knows where you are, and when you expect to be back. Heat exhaustion, sun stroke, and dehydration are not things to toy with. All three of them will sneak up on you, and you won't know it until you are already in one of those conditions. Please watch out for each other.

I look forward to seeing all of you at the appreciation lunch, and at the meetings and around the railroad.

John Bergt





Sunday Public Run And Park Volunteers 2016
Appreciation Luncheon

SATURDAY, MAY 14TH at 11:30AM

The MLS BOD cordially invites all MLS members that have spent considerable amount of time and effort in making our 2015/16 Sunday Run Public Train runs a smashing success and in maintaining the park during the season. So on Saturday, May 14th at 11:30AM please join all the volunteers for a thank you luncheon. Chefs Helen and Michael are preparing a homemade food menu and needs several helpers in the preparation and setup of the food. Contact the Chefs if you can assist. If anyone wants to contribute to the dessert menu, please let me know.

Remember volunteers have first choice in the serving line.

LUNCHEON MENU

HARD SHELL TACOS WITH GROUND BEEF AND SHRIMP ENTREES

WITH ALL THE FIXINGS

REFRIED BEANS AND MEXICAN RICE

HOMEMADE SALSA WITH CHIPS

COOKIES, ICE CREAM, BOB'S SPECIAL APPLE COBBLER

BOTTLED WATER



Operations Team Update:

Red Tags- We have received a re-stock of red tags to mark equipment that has issues and should not be used. They are blank, so please legibly write your name, contact phone number and date. On the flip side write the issue (horn inoperative, particle separator clogged, motivator not motivating, etc). There are red tags in the station master desk and the cup in the loco shed. Please update the chalk board in the loco shed as well. Chalk is located in a waterproof cup. Please keep it sealed.

Yellow Speeder- The yellow speeder is being used for Sunday Junior Engineer School. We ask that you charge it for the amount of time you use it. An extension cord can be run out the door of the loco shed for up to 24 hours for charging. We need to have it charged for Sundays. We used it [last Sunday](#) and found one of the child speed limit switches (right in photo) was broken. If damage occurs, please red tag it and mark the chalk board so we can fix it for the rest of the club to enjoy.

Orange Speeder- There is a potential project of replacing the gas engine in the orange speeder with a donated 24 volt electric motor and speed control. Dakota and Wade have offered to lead the project.

GPS Units- Remember the club purchased GPS units to use during public runs. We want to maintain our 5mph speed limit for safety. When the run day is complete, please place your GPS unit in the freight shed and connect it to the charger to be ready for the next use.

Conductor Alarms- Please remember to put the key fob back on the hook on the base unit. We seem to always be missing 1 or 2 of them. When you put the alarm away for the day, confirm the key fob is present and that the power switch is off. I find half of them are still on in the shed after the run day..

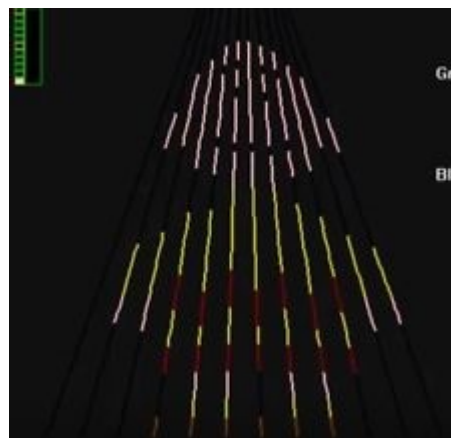
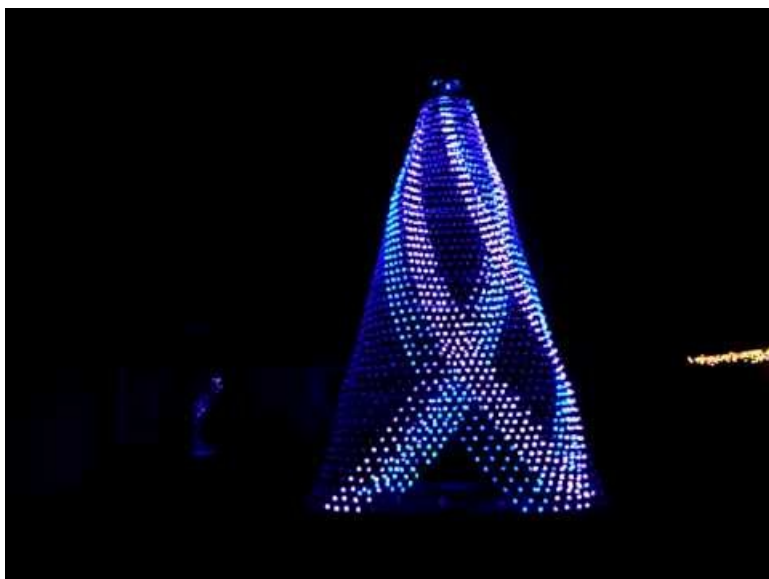
Locos- Fred, Mike and the guys have been working to repair the locos (after they thoroughly inspected every MLS riding car). BNSF 2001 is nearing completion with new wheels, axles, larger sprockets and chains. Then we'll work on 6005 wheels. Last will be 7282. We have not done a full inspection yet to know exactly what attention it requires. It is the mascot of our club, being purchased in 1982. The Neuer boy's keep Lil Blue running by using it for work trains. If you want a fun, easy to operate train, try using Lil Blue instead of a 1,000lb road loco to cruise the railroad with friends and family. And remember to fill out the loco log books located in the loco shed for each use including private rides. There is one for each loco. And you are required by club rules to provide your own gas for private rides as well.

Holiday Lights: Fred has spoken with several people who have built mega-trees and they have provided so much great insight to build an impressive mega-tree. That will save us from going through the learning curve of making costly mistakes. What is a mega-tree? Remember the sound synchronized Smart LED's lights the covered the exit walkways for the Holiday Lights show? We will string 6,400 LED's in 64 strings from the top of 40' pole located between Harnish Valley and Geronimo. Then we'll program the 19,200 channels it takes to make a show (And that is just for the tree). It gives us the ability to do animations, cartoons and movies if we choose.



Hank

We had a generous donation of **Christmas** decorations from Barb and Mike Mulvenna. They have had a huge **Christmas** light show set up at their house for the last several years. It was becoming too much work to set up thousands of lights and wires each season. They decided to donate many of the items they used to MLS. We received a large snow maker, very large "Merry **Christmas**" wreath, boxes of electronics and controllers, spools of cable and wire, conduit, an electric steam outline train, outdoor speakers, a barrel of LED lights and another of extensions cords. And an animated Santa from Woolworth's Department Store in Chicago. It will all be added to our annual Holiday Lights show. The photo shows Mike next to some of the items they donated to the club. Thank you both for adding to our light display. hank.



TIME LOG HOURS

The hours shown are from 3-28-16 thru 4-26-16. Where entries were incomplete, it was not possible to determine the hours worked.

Donna Holm	35 hrs. / Painting/ Public runs/ lights
Bob Douglas	108 hrs. / Track/ Treasurer duties/Meet
Joe Fego	15.5 hrs. / Track / Equipment maintenance /weeds /sawmill
Perry McCully	33 hrs. / Trash disposal /lights /Train rides /maintenance /track
Pete Pennarts	24 hrs. / Facilities maintenance
Ed Houk	4.5 hrs. / Public Run crew /track
Linda Houk	3 hrs. / Club house cleaning/ Meet
Fred Greenwald	36.25 hrs. / Equipment maintenance/ Inspections
Dave Griner	12.5 hrs. / sawmill/weeds /Equipment maintenance
Jerry Grundy	18.75 hrs. / Dispatcher/Gift Shop
Ann Littell	10.5hrs. / Gift Shop
Logan Littell	10.5hrs. / Weeds
Myrna Brooks	18.5hrs. / Maintenance
Sandra Grundy	11hrs. Gift Shop
Bob Alkire	11hrs. / Sawmill
Cliff Fought	24hrs. Misc.
Scotty Brooks	8.5hrs. / Track / Equipment Insp.
Mike Russell	6hrs. / Public Runs
Joe Snyder	25.5hrs / Track work
Fran, Ben, and Jonathan Neuer	3hrs. / Ballast work

.Total logged hours = 415 hrs.

It should be noted that this month h was a Birthday for Bob Douglas, and to note 18 years and 32,400 hours of service to the Club !! Thank you Bob !!!!!!!!!!!

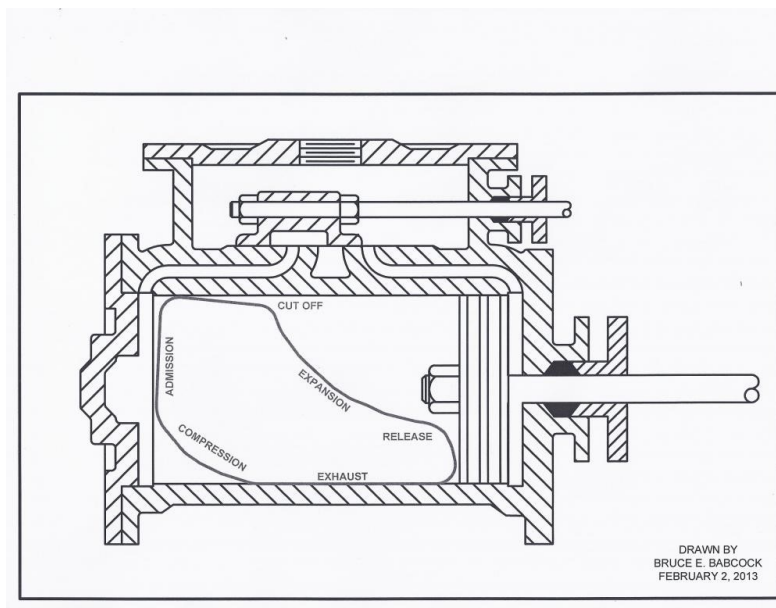
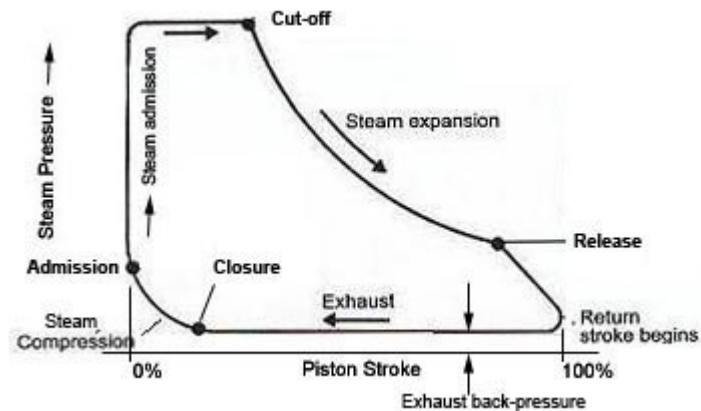
It should be noted that this does not count the many hours put in, but not listed on the log. A Great Thank You to all !!

STEAM LOCOMOTIVES

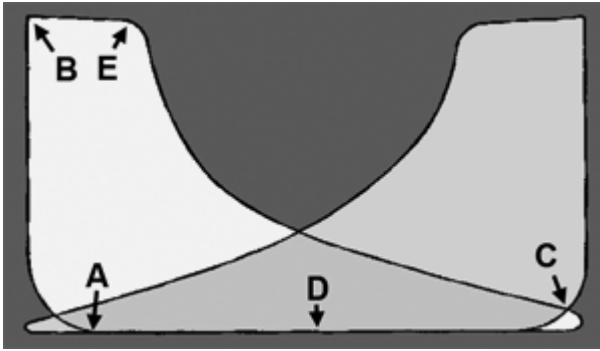
VALVE GEAR

Hello again. This time we will continue the exploration of the intricacies of valves and valve gear.

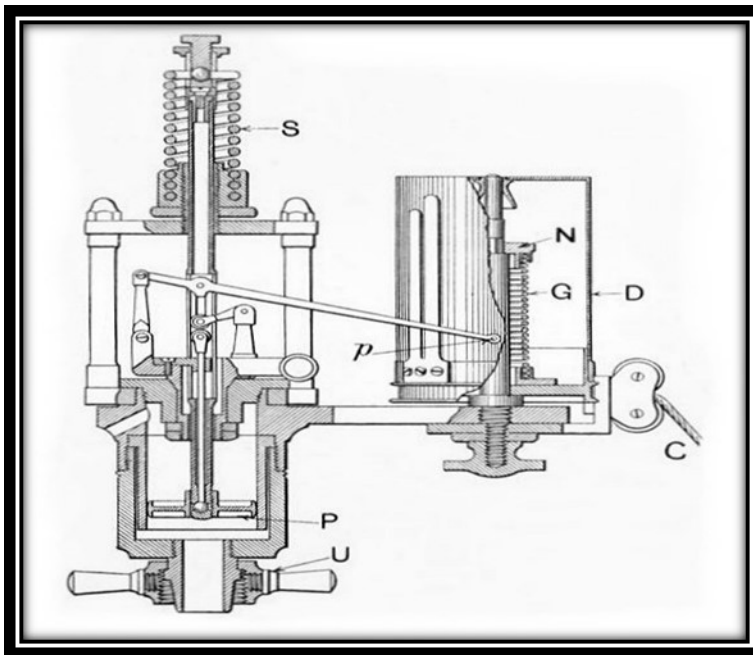
Any discussion of valve gear centers on the indicator diagram, as shown below. As can be seen there are a series of “events” recorded, being, in the order of operation; admission, cutoff, expansion, release, and compression. These drawings show those events for one end of the cyl.



When events are shown for both ends of the cylinder, the “card” looks like this;



The term “card” is used in reference to the drawing made by the indicating device. The indicator registers the pressure in the cylinder thru piston P, which moves the arm. The arm has a pen/pencil at point p that records its movement on paper wrapped around the drum D. The drum is rotated via linkage and pulleys to the crosshead, hence positioning the paper under the pen at the proper point in the stroke of the piston in the cylinder.

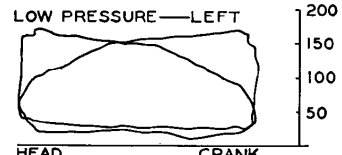
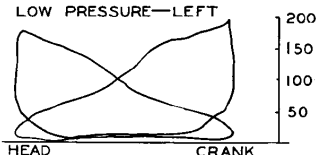
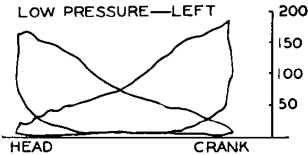
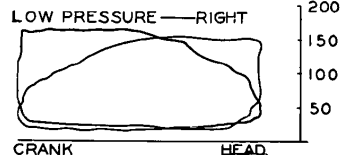
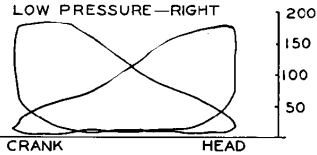
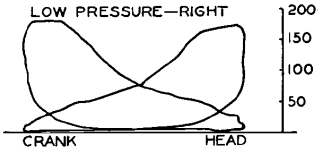
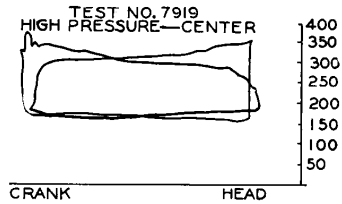
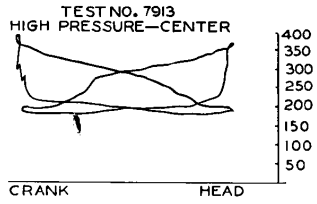
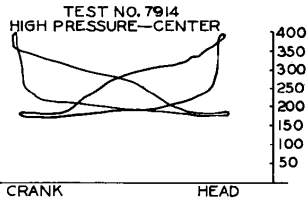


Here’s a picture of the real thing, having its origin with Watt. This device produces what is referred to as a P/V (pressure/volume) diagram or loop. This particular indicator probably dates to about 1885. Today this is accomplished electronically using pressure transducers, (not near as much fun).



The whole exercise is conducted to give a visual representation of the pressure relative to the piston in the cylinder as the volume increases due to the movement of the piston over its complete stroke. This same method is also used in internal combustion engines, especially diesels.

Here is an example of a series of “cards” taken when testing the Baldwin experimental, three cylinder engine, which was their 60,000th locomotive built in 1927. The cards show the P/V diagrams for both ends of the cylinder. It’s very interesting to study them and note how unequal the pressure can be yet have the engine perform quite well. When the diagrams (“shoes”) meet in the middle, the valves are set as close to correctly as possible, however, they were seldom “dead nuts on”.



R. P. M., 120; Cut-off, 60/30; Throttle, full;
I. H. P., 2333; Speed, M. P. H., 22.5

R. P. M., 120; Cut-off, 70/40; Throttle, full;
I. H. P., 2914; Speed, M. P. H., 22.5

R. P. M., 120; Cut-off, 90/70; Throttle, full;
I. H. P., 3978; Speed, M. P. H., 22.5

Next time we'll explore "mean effective pressure".

Take care.

Dave Griner

