



# STACK TALK

## FEBRUARY 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

2017 OPS MEET JANUARY

2016 SPRING MEET MARCH 17, 18, 19, 20

2016 FALL MEET NOV. 3, 4, 5, 6

*must start this month's column with a confession of omission. In last month's column, I forgot to thank Jim Brown and Bill Pardee for the many years of work they have done on our signal system. They picked up where others left off, and helped make Maricopa Live Steamers known as a place that is a "True" railroad. Thank you for your time, your knowledge, and your willingness to deal with all the "It doesn't work" complaints.*



*I would also like to thank Mick Janzen for her push to get the AED installed, as well as the initiative to get a second one. We didn't need it during the ops meet, but that's only because someone did the right thing, and let themselves be taken to the hospital. I can personally add to that as well. Five years ago I had a procedure done on my heart, right before the ops meet in 2011. I attended the meet, but only because I swore to my wife on a stack of Bibles that I wouldn't leave the dispatch tower. Fast forward five years, and this past week, I again found myself in the hospital with chest pains. It turned out to be an expensive case of indigestion, but the comfort of knowing we have lifesaving equipment here at the park is immense.*

*Now, down to railroad business. Thanks go first to Jim Zimmerman for running a fabulous operations meet. We had a great turnout, including multiple first timers. I heard great com-*

*pliments about our meet and our railroad. You should all be proud of the event that we put on. The visitors from Golden Gate Live Steamers and Sacramento Valley Live Steamers both said they were going to bring more people with them next year.*

*Our new website should be live by the 10<sup>th</sup> of February (the designer is going on vacation then). I have seen the work so far, and am very happy. I believe that you will all be pleased with the end result. The old site will be preserved for archive purposes (but will no longer be accessible online).*

*The driveway paving project has cleared all hurdles, and is slated to begin on Monday, February 1<sup>st</sup>. The only obstacle now is the weather that Mother Nature has decided to send our way. We eagerly await the improved dust control.*

*New steel track is going in on Werner branch, starting with the long sweeping curve from the tower toward Werner station, and going all the way around to Fisher. This will be the fourth section of track that will have steel rail on both the inside and outside tracks. You should notice a smoother, quieter ride.*

*Finally, a couple of housekeeping items. Please, if you use a club locomotive, log the time in the log book. There have been several instances of missing time. Also, please remember to turn off the lights in the club house when you are leaving. I came to the park the other night, and after unlocking the gate, found the lights on in the clubhouse.*

*As a closing thought, when I was in the hospital 5 years ago, and again this past week, I took some time to reflect on what is important, and what isn't. We all have things in our life that seem to be super important, but when it comes right down to it, family and friends are among the most important things to all of us. It is hard to let go of events that happen in the past, but they only hold us back from enjoying the future.*

*Have a great February, be safe on the tracks, and have fun.*



***From: Jim Zimmerman***

***Sometime ago I lent an MLS member my PAACHE ABRASIVE SPRAYER, (Sand Blaster) and I can not remember who that member is.***

***I am in need of it and if you have it , I would really appreciate a call. Thanks for your help with this.***

***Jim Zimmerman***

***480-980-7098***



# 2016 OPS MEET

*A great meet as seen in these pictures by Rick White*



Nick Edwards and Jeff Benton



Werner Station



Dewey Mills the assistant Yard Master ,out making sure the trains are ready and balanced per branch.



Jeff Benton, Gabe Zorbas and Al Worrell



Meet with a passenger train at AJO Junction



Jeff Benton and Rick White

## TIME LOG HOURS

The hours shown are from 11-23-15 thru 12-28-15. Where entries were incomplete, it was not possible to determine the hours worked.

Donna Holm 82 hrs. / Painting/ Public runs/ lights  
Bob Douglas 128 hrs. / Track/ Treasurer duties  
Joe Snyder 38.5 hrs. / Track/ lights  
Terry Liesegang 56.5 hrs. / Signals /Track building  
Joe Fego 66.5 hrs. / Track / Equipment maintenance /weeds /Christmas trains  
Perry McCully 34 hrs. / Trash disposal /lights /Train rides /maintenance /track  
Pete Pennarts 10 hrs. / Facilities maintenance  
Ed Houk 34 hrs. / Public Run crew /lights /Christmas run crew  
Linda Houk 12.5 hrs. / Club house cleaning  
Fred Greenwald 53 hrs. / Equipment maintenance /lights /Christmas run crew  
Paul Lator 36 hrs. / Lights /Public and Christmas run crews  
Mike Russell 34 hrs. / Lights /Public and Christmas run crews  
Joe Kalisak 61 hrs. / Public and Christmas run crews  
Trish Kalisak 46.5 hrs. / Public and Christmas run crews  
Dave Griner 20.5 hrs. / Track /weeds /Equipment maintenance  
Jerry Grundy 34.5 hrs. / Dispatcher  
Tom Smith 13.5hrs. / Public and Christmas run crews  
Louden Smith 5.25 hrs. / Public and Christmas run crews  
Jim Zimmerman 36.75 hrs. / Ops. Meet organization /Public and Christmas run crews  
John Bergt 11 hrs. / Public and Christmas run crews  
Tom Harrington 16 hrs. / Facilities maintenance /Christmas run crew  
Dave Kulman 27 hrs. / Track  
Frank Berle 5.5 hrs. / Christmas run crew  
Jim Theobald 16.5 hrs. / Public run crew  
Mike Levandowski 22.5 hrs./ Christmas run crew  
Nicholas Conelly(spelling?) 5.5 hrs. / Public run Crew  
Chuck 6 hrs. / Public Run Crew  
Fran Neuer 11 hrs. / Public Run Crew  
Ben 10.5 hrs. / Public Run Crew (apologies for missing your last name)

**Total logged hours = 934 hrs.**

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 !!

I WOULD APPRECIATE A NOTE OF THANKS FOR MR/MRS. CLAUS [AKA WENDELL AND DIANE GIST].....THEY WERE THERE

EVERY NIGHT FOR THE CHRISTMAS RUN AND TALKED TO 1059 KIDS WHO SAT ON "SANTA'S" LAP.....I KNOW HE WAS TIRED AT THE END OF EVERY NIGHT....

SO, A VERY SPECIAL WORD OF THANKS TO THIS WONDERFUL COUPLE WHO WORKED WITH US UP TO CHRISTMAS.....WENDELL AND DIANE INDICATED THEY

ENJOYED EVERY NIGHT!!.....MIKE RUSSELL



# !

## STEAM LOCOMOTIVES

### SIDE RODS

This month we'll continue on with side rods, discussing the use of roller bearings. Defining this type of bearing is quite nicely done by Wikipedia as follows:

A **rolling-element bearing**, also known as a **rolling bearing**,<sup>[1]</sup> is a bearing which carries a load by placing rolling elements (such as balls or rollers) between two bearing rings called races. The relative motion of the races causes the rolling elements to roll with very little rolling resistance and with little sliding.

One of the earliest and best-known rolling-element bearings are sets of logs laid on the ground with a large stone block on top. As the stone is pulled, the logs roll along the ground with little sliding friction. As each log comes out the back, it is moved to the front where the block then rolls on to it. It is possible to imitate such a bearing by placing several pens or pencils on a table and placing an item on top of them. See "bearings" for more on the historical development of bearings.

A rolling element rotary bearing uses a shaft in a much larger hole, and cylinders called "rollers" tightly fill the space between the shaft and hole. As the shaft turns, each roller acts as the logs in the above example. However, since the bearing is round, the rollers never fall out from under the load.

As can be seen by the definition, there is a vast difference between the roller and plain (friction) bearing. With this difference comes a significant level of precision and complication as can be recognized by reviewing the following drawing. A major component of successful application of this design is maintaining close alignment of the pins and driving axles, the N&W 611, for instance is trimmed to within 0.015" all around, very close for a 4-8-4. The ability to accomplish this is largely due to the use of cast steel frames, which removed the flexure of a built up frame. In conjunction with this aspect, was the use of self adjusting wedges and manganese steel jaw liners.

The next innovation is the proper lubrication of the bearing, again, studying the drawing we can see the crankpin is hollow, with grease being fed from the out-board end, supplying the rollers through small holes strategically placed in the crankpin.





The next picture clearly illustrates the tapered roller bearing and the associated races in which they run.

Obviously the first cost of this type of bearing is high, but compared to the typical brass, plain bearing, the **maintenance** cost is so superior that the difference in costs are retrieved through extended service life.



Latter day, progressive railways recognized these advantages, and if steam had continued, roller bearings would have become the standard.

A very interesting discussion regarding the application of this design in the latter days can be found in the book “Camels and Cadillacs” by Phil Girdlestone. These were South African Railways 4-8-4’s built new in the early 50’s. The book is well worth the read.

We could spend a great deal of time on this subject but for now this will have to do.

Next time we’ll look at crossheads.

Take care,        Dave Griner

