

## President's Message

Yes, some of us are still laying track in Adobe Yard--- even in this heat. Boy does it feel good to get in the club house with the A/C on. The club has put in five new receptacles for charging electric engines plus adding more track in the yard for longer trains. It would really be nice if you folks that have electrics or anyone using our facilities could donate some money to help offset the cost of this project.

It might be a good idea if the local club members would sit down and turn on their computers and click on Maricopa county parks and rec. rules. Not only does the club have rules but the county has rules that we have to follow. Just to name a few --fire ban, no flying of planes or drones etc, and leashes on dogs. Dogs and coyotes don't mix very well in our park anyway.

There is no meeting in July due to lack of interest. Just kidding! NO meeting, and Aug. meeting is the 12th at 6 pm and it's the Ice Cream social. It would be nice if some of you could bring cookies and cakes. Donna Hohm is in charge.

Heat kinks are the norm this time of the year. Slow down if you have to go through a kink. When you get back from your ride please report where the kink is and write it on the white board next to the entrance door of the club house. Pottsville is still closed due to the project of changing aluminum rail to steel in the curves.

Carlos Santos broke a hip down in Yuma the other day. Jeff Hickman is getting better but still has the vacuum pump on his foot and Roger Netz is back in his regular assisted living home. Let's keep them in our thoughts for a speedy come-back and better health.

Have a safe 4th of July and come back with all your fingers.

Safety first

Perry

# Calendar of Events

OT	July 2017				
ly	July - no meeting. July Christmas planning committee meetingJuly 12 Ford Station Board meeting and General meeting: Saturday, August 12 Also, Ice cream social			10:30 AM 6:00 PM	
ts nt s					
wski	Public Runs - first day	Saturday	Sept. 10	12:00 - 4:30	
	***Fall Meet***		October 26, 27, 28, 29		
n	First Christmas run.	Sunday	December 1	6:00PM - 8:30 PM	

#### **RUN CREWS ARE STILL NEEDED FOR FALL - PLEASE HELP OUT** Check in the June issue on how to help out.

Abbreviated Minutes from June 12th Board Meeting canceled - only general meeting

General meeting began at 12:00 PM. Very short meeting followed by appreciation luncheon for volunteers

Superintendent's reports: All reports status are of June 12th - see board at Ford station for any updates.

Construction, Cliff Fought - Nothing new to report.

Operations, Hank Gallo - Nothing new to report.

Tower, Greg Gorman - Nothing new to report.

Maintenance of Way, Joe Schnyder - Working on track kinks due to heat. Should be complete by end of the week, Pottsville closed until work is done.

Boiler Inspector, Bill Pardee - nothing to report.

Safety, Pete Pennarts - Fire ban is in place.

Road signals, Terry L - Signals are down and being worked on. Should be up after Joe finishes track repair. Check the board for status.

Pete and Cliff volunteered to built bookcases for the station.

Christmas Committee, Joe Kalisack - Budget for Christmas approved.

New member, Mike Post - Welcome Mike!

THANK YOU TO ENGINEERS ON RUNS. WE NEED MORE NEXT SEPTEMBER. See page 10 and 11 June Stack Talk on how to sign up.

Sandy Rauperstrauch, Stack Talk editor, thanks all who send photos and articles. Without you, there would not be a newsletter. Remember to submit articles and photos one week before the end of the month to allow for formating in the newsletter. **braup@cox.net** or **srauper@gmail.com** 

2017 MLS Board of Directors

Perry McCully President

Pete Pennarts Vice President

Bob Douglas Treasurer

Mike Lewandowski Secretary

Mick Janzen Joe Fego Mike Grant Members at Large

Cliff Fought Construction Superintendent

> Hank Gallo Operations Supervisor

**Greg Gorman** Tower Signal Superintendent

**Terry Liesegang** Road Signal Superintendent

Bill Pardee Boiler Inspector

Pete Pennarts Safety

Joe Schnyder Maintenance of Way Superintendent

> Al Ford Construction Superintendent Emeritus

John Bergt Past President 2016

Timothy Freeman Web Master

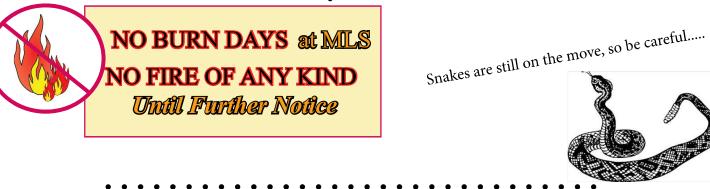
**Jim Zimmerman** Engineering Test & Card Administrator

Sandy Rauperstrauch Stack Talk Editor July 1, 2017

Maricopa Live Steamers

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Safety at MLS



### When food is served, they come!

It was a pretty good turnout for the volunteer appreciation lunch in Ford Station which followed the June 12th meeting. Hamburgers and hot dogs were provided with potluck sides and desserts. Great salads and desserts are always a hit.







Thank you, Gabe Zorbas, for taking charge of this event and to Donna, who is always there to help out in the kitchen.

And thanks Stan Ferris for the photos!

Continued from Dave Griner's Shop Definition from June's Stack Talk

### SHOP LOCATIONS

There are four (4) facilities that meet our definition of a locomotive shop in the very first years of steam locomotive use. Which one of these was specifically the first has been very difficult to determine, because they all came into existence very close together chronologically. However, the "circumstantial" evidence will be presented with appropriate references to support a given premise regarding the issue. There is a certain amount of deduction involved which begs of verification, hopefully, the future will provide that documentation.

> 1. Baltimore and Ohio Railroad at Mount Clare, Baltimore, Maryland 1829

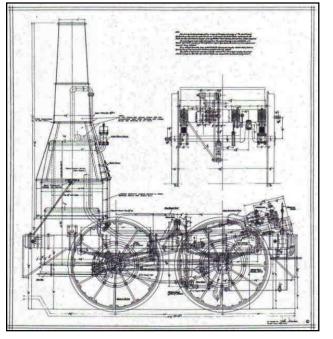
This road first operated using horses and rudimentary cars, with the horses being stabled at what is referred to as the Pratt Street Stables It was also here that repairs were made to the cars and, as noted in other accounts, the "Tom Thumb" was erected. A forge and machine shop were added in 1833.3

The genesis of the Mt. Clare complex was a horse stable and car repair facility built in 1829. The shop was 300 feet long and 75 feet wide and was located on the tracks south of Pratt St. at the current museum site. The Tom Thumb was supposedly assembled here in 1830, making it also the birthplace of the first American built steam locomotive.

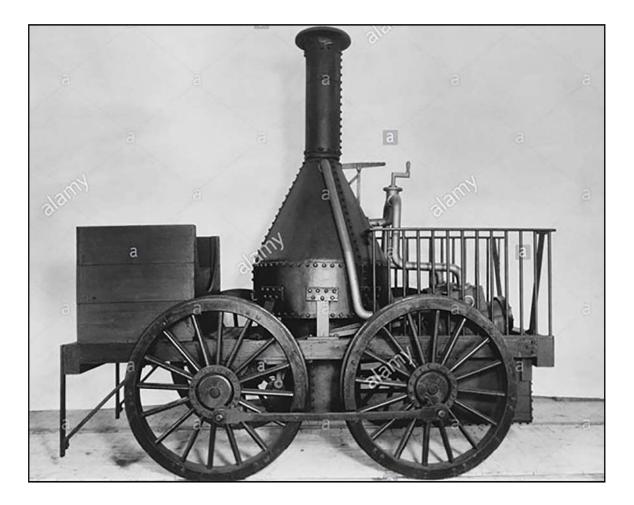
Does this facility qualify as a locomotive shop? As it stood in 1830 when the "Tom Thumb" was erected, probably not and by our criteria as defined by our definition not until 1833.

2. South Carolina Canal and Railroad Co. at Charleston, South Carolina

The first locomotive for this railway was the Best Friend of Charleston (pictured), built by the West Point Foundry, Cold Spring, N.Y. and delivered in December 1830. It blew up on June 17th, 1831, after which the remains were sent back to a shop in Charleston.

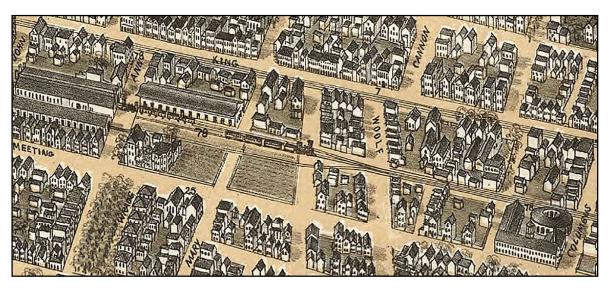


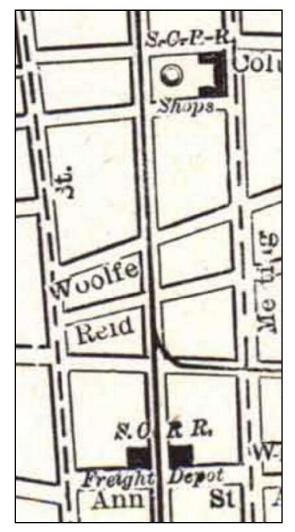
It was rebuilt at that facility and returned to service under the name of "The Phoenix" on October 18th, 1832. This reference from the American Railroad Journal (4), of 1833, shows distinct evidence for a functioning facility specifically dedicated to the repair and maintenance of steam locomotives, by noting testimony of the event by Mr. Petsch whose title is given as "Master of Workshops".



The picture above depicts how the Best Friend was rebuilt. It is immediately apparent that this work must have been conducted in a facility where the necessary tools and machinery were at hand, i.e. an existing shop specifically for locomotive repair. So, by deduction, the shop in Charleston had to have been in existence and functional earlier than June 17th, 1831.

A bit more circumstantial evidence can be found by studying the city maps of Charleston. Here is one from 1872, yes, significantly later, but the position on Columbus St. had not changed from the beginning of the railroad. The shop is depicted in the lower right.





Here is another map from 1898 which distinctly calls out the shop and what appears to be the turntable.

Since it is a major and costly event to move a complete shop, the 1872 view is believed to be virtually as it was first established. This view shows some refinement through enclosing the area surrounding the turntable, but it can be seen this was a diminutive facility, certainly having its origin at the inception of the railroad.

Does this meet our criteria? From the evidence......yes.

We'll continue next time. Take care, Dave Even when the temperature is over 100 degrees, Joe and his track crew are busy replacing track panels.



Frank helps Joe remove track panels.



Ready for new panels.



Frank is always ready to help out.



Ballast is spread.





Track is the FOUNDATION of all that we enjoy in the hobby. No track, NO trains! Just say'n... So, for all of you who have been installing track, THANK-YOU! For those of you on the fence about lending a hand, know that even one day can be most helpful to put a project over the top. Talk to Joe Schnyder about just giving one day, and he'll do the rest to get you set up! Here's a cheery note, Joe doesn't work when it gets hot, so neither will you, when you're helping out... Listen, this hobby is FUN, but you need to get there "on track"!



Checking out their finished track. Looks Good!

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## **High Ball!**

By John Lovely

This month's "High Ball" may be a little shorter because by the time you read it, I will be at (or returning from) the Operations Meet at Train Mountain. Since Operations Meets are all about switching, it seems only appropriate to talk about switching on the "real" railroads. Something that most crews and even management try to avoid. It is labor intensive and prone to accidents and mistakes. Switch crews need to have the highest levels of awareness and communication going all the time.

Of course, making up a train is going to require switching, as well as taking it apart at the destination. Along the way it may involve setting out or picking up cars at industries. Of course, that is what we modelers like to do.

Assembling a train at the origin point and breaking it down at the terminal point involves many car moves. To me, watching a hump yard in operation is fascinating – at least for the first half hour or so. Flat yard switching interest wanes in about the same amount of time. Once the freight cars are coupled in the correct order, each air hose needs to be coupled, angle cocks opened, and an initial terminal air test performed. Initial Terminal Brake or air test involves charging all the train's air tanks, observing the set and release of all the brakes (all must be operational), and determining air leakage (not more than 5 psi/minute).

There are two methods for testing leakage: One involves taking a 20# set (reduction in pressure), and observing the drop in train line air pressure in 1 minute. It takes 3 minutes to go through all the steps. And someone needs to traverse the train to observe the sets and releases of the brake shoes/cylinders. The other method is the air flow meter on the engine. When a set is made the air flow is high as the brake pipe exhausts, then settles down. Watching that the air flow rate falls below a certain point indicates the system is sufficiently air tight. With a 100-car train, you have 99 joints, 200 Angle cocks, 100 brake valves, air tanks, retainer valves, and cylinders. Only 5 psi/min leakage is allowed? (Trucks and busses are allowed 3 psi/min leakage. Go figure.)

Ready to go? Couple the engines, charge the system again, make a set/release seeing that the EOT device reacts and you are ready to get moving. As soon as you get some speed, you want to do another set/release rolling brake test and making sure you have some retarding effect from the brakes.

What about even a single car set-out? Just cut the car loose from the rear of the train – right? Not! If it is at the rear of the train for a following point set-out, there is always stopping, opening the switch, shoving the car to position, stopping, setting hand brakes, do a roll test – to make sure the brakes are holding the car being cutting loose. Cutting out the angle cock on the rest of the train, pulling the pin (maybe bunching the slack to do it), and pulling away, so the air pops and the car goes into emergency. Next, pull out to main track, close the switch, set the EOT device, and notifying the dispatcher that the switch has been returned to normal. Setting out a car mid-train involves additionally securing the trailing cars, recoupling, recharging, and making the brake tests again. Adding a car, or cut of cars, mid-train involves a full air leakage test and making sure the brakes operate correctly on the cut.

With passenger equipment, you also have electrical cables, diaphragm curtains, and maybe communication lines to contend with. Back in steam heat days, you had the steam pipes too. Occupied passenger cars are always switched with full air brake connections, meaning you must charge the system and do a set/ release for each coupling. Throwing a switch is a multi-step process too. First the Conductor holds a job briefing to determine what is going to happen and who is going to handle the moves. This can be a quick radio conversation. Then you check that the switch points are clear of any obstructions, unlock the switch stand, throw it, check that the point is firmly against the stock rail, latch or lock the switch stand, and make the shove. Coming out of the spur the procedure is reversed. GCOR requires the Dispatcher to be notified of the operation of a main track switch, and that it has been restored to normal before the crew leaves the location. Otherwise you may need to complete a SPAF – Switch Position Awareness Form. This form records when the switch was changed, by whom, and signed by the Conductor.

On our 7.5" railroads, we can usually see our entire train. On full size trains, the engineer usually can't see beyond his engine, let alone judging distance from the end of the cut. You need someone to "protect the shove." Commands can be given by radio or hand signals. The person observing the shove must be able to see the track for the length of the shove. If he/she can't see it all, calls for movement are given incrementally. The full command what be something like, "Lined for track 4, clear back 5 cars to a stop." Where, how far, what for. The engineer repeats what he/she heard.

When using a radio, the engineer needs to stop in half the distance given unless he/she receives additional clearance. If the person protecting the shove, gives a short distance, the engineer will go slowly. A longer distance usually indicates a higher speed is OK. When we shoved from Williams to Imbleau (53 miles) for the photo train, I was saying, "Clear a mile." When using hand signals, the line of sight is important. Sometimes it requires several brakemen to relay the signals around curves.

#### Questions often asked:

How many hand brakes? GCOR says an adequate number to hold the train. Obviously, the train at Lak-Megantic failed that test.

How long does it take to set-out a car? At least 5 to 15 minutes. You must secure the cars left standing, cut out the air and other connections, pull away, change the switches, park and secure the car set out, return to the train, couple, re-attach all the connections, recharge, and do a set/ release of the brakes. On passenger cars, we pull the emergency valve to put the cars into emergency. Pulling the air hoses apart on freight accomplishes the same thing. It takes a long time to pump up the air from an emergency set. You don't "bottle" the air - close both angle cocks. MUing engines? You have at least 8 connections to be made – train line air hose, 6 loco brake hoses, and the MU cable, and maybe HEP. Then perform a locomotive brake test: Set and release automatic brakes, set and bail automatic brakes, set/release independent brakes, and check the leakage. Also make sure the other units are responding to the lead unit controls. And get the computers to talk to each other if you have DP.

Next month I will have some news about Train Mountain to share.

John

Maricopa Live Steamers

## Reminders:

Christmas in July means, don't miss the decorating/planning meeting Saturday, July 12th at 10:30 in Ford Station.



Next General Meeting August 12, 6:00 PM It includes the famous Ice Cream Social!

If you are planning to attend, please bring cakes and cookies. Sound's like a birthday party! Let's celebrate that cooler weather is on it's way??

The newsletter is one of the perks of being a member of Maricopa Live Steamers The mailing list is 225 members. However, only 196 have paid dues for 2017. A reminder: PLEASE PAY YOUR DUES.

Have you heard jungle drums? Well it's true!
Maricopa Live Steamers
is looking for a Stack Talk editor.
If you wish to take on the position,
please talk to Perry.

When I volunteered to take on the Stack Talk, I didn't know that my quilting business was going to be so successful. As much as I love being the editor, a busy work schedule is keeping me from continuing. There is a lot of talent in the club and we are hoping one of you will take on this task. I can help if you need it. Thanks for all the support and thanks to all who contribute. Sandy Rauperstrauch

> IMPORTANT! If you have a container at MLS, please send your key # to Bob Douglas to update the key list. rdouglas9@cox.net