



Maricopa Live Steamers

STACK TALK

OCTOBER 2019

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



President's Page

Well, here it is October and it is finally cooling down some, to just the high 90s, but I will take it. The board has made some strides toward getting the Christmas lights program off the ground, and let us hope for a good outcome.

We are trying to get more of the concrete tie program rolling. **THANK YOU** to Terry Liesegang. He has stopped working on signals and has been helping Bob Douglas and myself get a lot of the ties in. He has developed a system that really makes huge progress at installation and securing the ties to the rails, so we can come along and ballast level and tamp them. **THANK YOU** Terry, you are really saving my back.

I have spent quite a bit of time fixing heat kinks this year, places where we were lacking ballast and had tight rail conditions, but I am very happy to say there were no kinks where the concrete ties are installed. Because of their weight, they seem to be holding the track down. I was really sweating bullets whether or not they would lift out of the ballast, but since the 110° days for this year are behind us, I think it worked. **THANK YOU** Cliff Fought and Pete Pennarts, for your design and building of our concrete tie forms and all of the work to get them to production and delivery to me. Plus anyone else who helped make the ties, **THANK YOU**.

While I am on the subject of ties, when we take ties to the treatment plant, this treatment works very well at keeping the termites out of the wood for what seems to be about 5 to 6 years, before it finally dries out and the termites move in. When the termites get into the wood, it no longer holds the screws and thus no longer holds the gauge of the track. The railroads use creosote to deter termites in their ties, but we cannot use anything like that in the county parks. Where Bob Douglas and I are working now, on Far Flung Branch at Manley curve, the ties have been in since 2007. There are pockets of ties that are termite infested and then you have areas that are untouched by the little critters.

Vice President's Page



These areas have ant hills, which is the only natural enemy the termites have. If you have ants you stand a good chance of not having termites. That came from a professional exterminator to whom I paid over \$1,000 to get rid of the little buggers at my home. Well, what I am getting at is that we need to look at buying plastic ties where one person can handle changing the ties in an area that needs to get away from wood.

We will continue to install concrete ties, but they are very labor intensive and time consuming. Right now, Bob Douglas is working on Manley curve, but has to reinstall wood ties. If he was using plastic, they would be good for a long time. Being that Bob is 83 years old, I seriously doubt he will be renewing ties there when they need to be done again in 10 years. Terry Liesegang is putting in concrete ties at Racewatch, and I am coming in behind him leveling, tamping and lining the track. I can't wait for Dave Kulman to get back, so we can get more done per week. He will be here October 15th. Please drive safely, Dave.

The plastic ties that came over from Scottsdale in 1998 were installed and they are in pristine condition, because we covered them up with ballast so that the sun could not get to them. They are holding gauge and surface, and from what I can see, they will for another 50 or so years. There are still a lot of wooden ties that will need to be replaced, and we must decide whether to continue replacing wood ties every 10 years or to find the money for plastic that will last for the rest of our lifetime. This is going to be your decision to make in the near future. The membership has approved the purchase of 10,000 dollars of plastic 2x4s to start making switch ties from plastic to preserve our track, and we will continue to make concrete ties for installation in areas where termites are killing us. When we use plastic ties, we can install them during the week and then have the track ready to use again on the weekend. But with concrete ties, we have to take the track out of service for a longer period of time to get it done correctly.

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OCTOBER CALENDAR

EVERY Saturday 7:00 – NOON General Work Day (VOLUNTEERS NEEDED at the SAWMILL DONATIONS of 2 x 4's are also NEEDED)

Sat. 10 / 5 11:00 AM Board Meeting

Sat/Sun 10 / 5-6 11 AM – 3 pm Start of PUBLIC RUN SEASON (Sat and Sun / 1st & 3rd full Weekends)

Contact: **SONDRA sondra.bronsard@gmail.com (SHOPKEEPERS NEEDED)**

Contact: **HANK hanksqt@yahoo.com (ENGINEER CREWS & GATEKEEPERS NEEDED)**

**Sat. 10 / 12 12:00 NOON General Membership Meeting
1:00 pm Holiday Lights Committee (Matt Rockwell, Dennis Beatty, Team)**

Sat. 10 / 19 8:00 AM Semi-Annual RIDING CAR INSPECTION (Hank) (VOLUNTEERS NEEDED)

Sat/Sun 10 / 19-20 11 AM – 3 pm PUBLIC RUN Weekend

Mon. 10 / 21 – Sun. 10 / 27 Fall WORK WEEK (Donna Hohm – Registration)

FRI/SAT 10 / 25-26 6 pm – 8 pm HALLOWEEN RIDES

Contact: **SONDRA sondra.bronsard@gmail.com (SHOPKEEPERS NEEDED)**

Contact: **HANK hanksqt@yahoo.com (ENGINEER CREWS & GATEKEEPERS NEEDED)**

Mon. 10 / 28 – Sun. 11 / 3 Fall MEET WEEK (Donna Hohm – Registration)

MON/WED 10 / 28-30 mini-OPERATIONS SWITCHING SESSION (John Draftz)

Vice President's Page (cont'd)

We can make all kinds of improvements to the Park area and all the creature comforts to keep people coming back, but if there is no usable track to run on, the people will not come here. I remember a public train that had a derailment problem, and when the train got back in the station, the riders were very upset about spending all that time waiting to get back on the train to get back to the station. Without usable track to keep people coming back for Meets and Public Rides, we are just 140 acres of weeds. I guess the point is, how long do you want the track to last? I will be asking at the next meeting for a large sum of money to purchase plastic ties, and it will be up to the membership to decide what you want, Bells and Whistles or track

on which to run. With the winter coming up, this is the time to work at installing ties, when we can work without 110 degree heat and the sun bearing down on us. I have kinks that still need to be done before the Meet gets here, so that hopefully the whole railroad will be usable by our guests during the Meet.

That is all I have to complain about this month, but we'll see what I can come up with for November.

If you have a strong back and know how to shovel ballast, please come see me, as I have a job for you.

Pete, I need more concrete ties.

– Joe

Pete Pennarts
President

Joe Schnyder
Vice President

Mick Janzen
Secretary

Bob Douglas
Treasurer

Joe Fego **Mike Grant** **Dave Griner**
Members at Large

Cliff Fought
Superintendent
Construction

Hank Gallo
Superintendent
Operations

Dave Kulman
Maintenance of Way
Superintendent

Matt Rockwell
Sawmill
Superintendent

Terry Liesegang
Road Signal
Superintendent

Dakota Clemens
Tower Signal
Superintendent

Bill Pardee
Boiler Inspector

Jim Zimmerman
Engineer Test
Administrator

Joe Schnyder
Safety

John Broughman
Public Run Crew
Coordinator

Perry McCully
Facility Administrator

Holiday Lights
Committee Chairman

John Draftz
Advertising

Donna Hohm
Membership
Committee Chairman

Joe Fego
1-inch Operations
Superintendent

John Bergt
Timothy Freeman
Web Masters

Ken Giordano
Stack Talk Editor

Send emails / photos to:
[MLSnewsroom
@Gmail.com](mailto:MLSnewsroom@gmail.com)

From the Desk of: John Bergt – Webmaster
Subject: New Website and eMail Technology

We recently completed a transition to Google Suites for our old technology suite. From an internet and web infrastructure point of view, it opens up new possibilities for us. Google is a big supporter of non-profit organizations, and so we are able to get access to a wide range of tools at no cost to the club. Some of these tools are for behind the scenes things, others will be more public facing.

For the last few years, our website has been geared toward our guests and train riders. We realize that our members also need to be able to use the website for club related activities and to get club information, such as club publications, rules, etc. We have created a survey that you should have already received in a blast message, but the link for the survey is below as well. Please take a few minutes when answering the questions, because the more you tell us, the more WE can do to make a better experience for YOU.

Website Survey: <https://forms.gle/vPiMWdKzRnd536sV7>

Additionally, we have set up some new email addresses for you to use to be able to reach the club leadership and Superintendents. To send an email to the Board of Directors and Superintendents, simply send an email to

ALLBOD@maricopalivesteamers.com. Your email will then be sent to all members of the Board. Additionally, we have created an email address for each Superintendent and will be working with each Superintendent to ensure that they get delivery of your messages at the address they wish to use. By standardizing the email addresses, we accomplish several things. You will always be able to use the same email address to reach the specific Superintendents, and no longer have to remember who is serving in what role, and then wonder if you indeed have their email address. All the addresses will also be made available via our website.

We are also working on restoring our live video feed which we know is something that you, our members appreciate and look at frequently. We are working on new internet connectivity at the park to make our video stream more reliable and also more viewable. We will let you know when the stream is back on line.

If you have any questions about the website, please send an email to webmaster@maricoplivesteamers.com, and we will be in touch with you.

John Bergt / Tim Freeman Your webmasters



Detours for southbound I-17 exit ramp closure at Pinnacle Peak Rd provided for [Fall Meet attendees](#) by Charlotte Hughes

The Arizona Department of Transportation advises motorists to allow extra travel time and be prepared to use detours while the following closures and restrictions are in place:

The southbound I-17 exit ramp at Pinnacle Peak Road will remain closed through Sunday, Nov. 17. Drivers on southbound I-17 should use the Jomax Road exit instead and follow signs for the detour routes.



STEAM LOCOMOTIVES BOILERS

STAY BOLTS part 3

by Dave Griner

Well, we made it better weather, sure is nice!! This time we'll deal with stay bolt attachment methods.

From the beginning (circa 1829), stay bolts have been threaded into the plates needing support. Seems rather straight forward, however, the question of what thread **pitch** to use (number of threads per inch -- **tpi**) took a while to reach an acknowledged standard. This standard turned out to be 12 tpi, but was not firmly established until Sir William Fairbairn conducted some experiments using iron boxes with the side supported by stays. In those tests he used 11 tpi, but as time went on it became apparent that 12 tpi was a better solution, since it provides three full engaging threads in a 5/16" plate. Even the current ASME Code for power boilers requires three full threads of engagement for any screwed stay. Interestingly, this means that no screwed stayed plate can be less than 0.250" thick.

The whole subject of a stay bolt is broken down into two separate problems, (1) the maximum tensile load that can be applied, and (2) the lateral bending load due to the expansion of the plates.

Here are some copper stays that have been installed and riveted over. Also note the tapped (threaded) holes for other stays yet to be installed.



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STAY BOLTS 3 (cont'd)

To the right is a "snap" used on a pneumatic hammer to create the riveted head and open out the tell-tale hole at the same time.

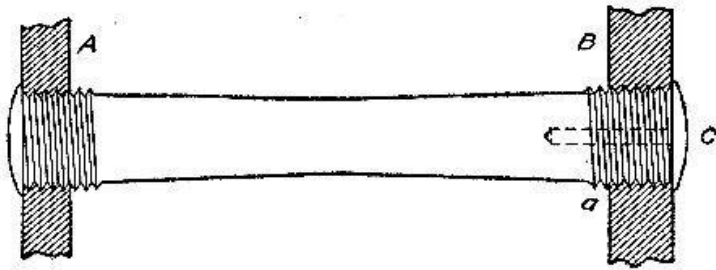
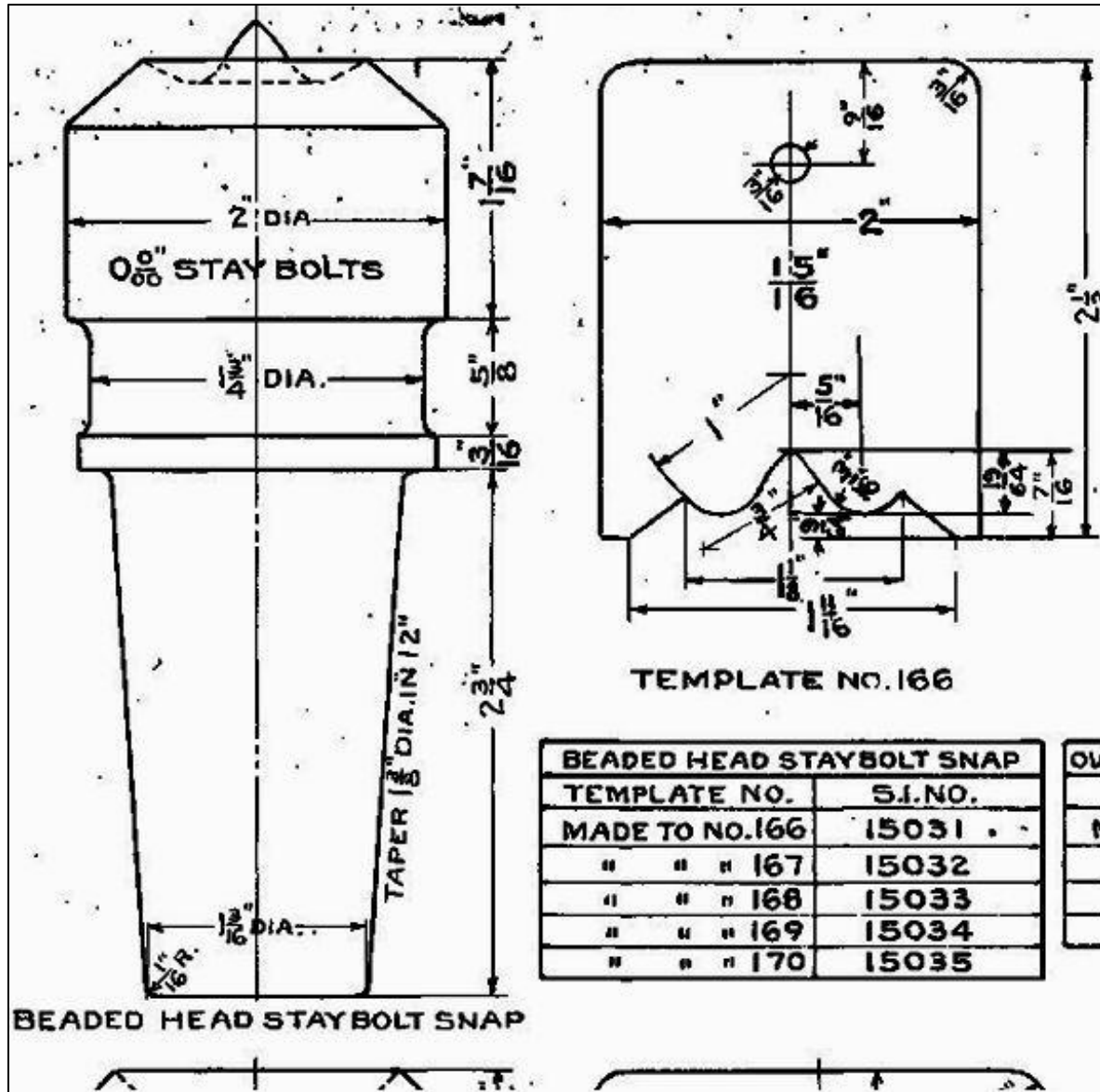


Fig. 40. Screw Stay-Bolt.

Shown above is a typical rigid, screwed stay bolt, with the ends riveted over. This is one of the most common applications. You might notice that one end (the outside of the boiler) has a hole drilled in the middle for a short distance beyond the inside of the plate, this is called a "telltale" hole, the express purpose of which is to blow steam and/or water if the bolt breaks or cracks. The reason for being on the outside is that bolts mostly break in this area, although many times the bolts are drilled all the way through.

This particular method was to be used right to the end of steam in this country, in spite of other methods that were developed overseas, which we will discuss later. It should be noted that, from the 1930's on, there was a movement to weld around the riveted heads in an effort to reduce leakage, which was always a maintenance problem from the beginning. It is referred to as "seal welding," and does in fact seal the bolt against leakage, hence reducing the time necessary to keep them tight in service.



STAY BOLTS 3 (cont'd)

All of this is applied to having the bolt ready to function in tensile strength, there is no provision for any bending at all. So as the plates expand, the bolt deflects as shown here to the right

The thinner plate depicted on the right is the firebox plate, the one on the left is the wrapper, so it becomes clear that, as the firebox expands relative to the wrapper, there is a distinct deformation. It's not difficult to see where the bolt is going to break, and the need for implementation of the telltale holes to indicate any breakage at a glance.

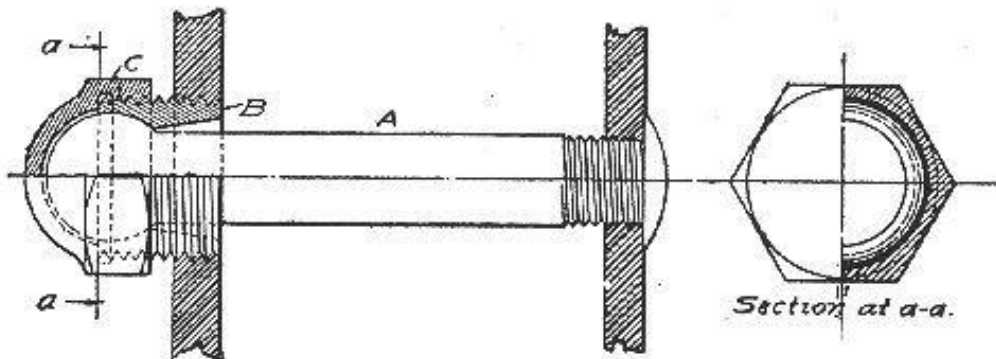
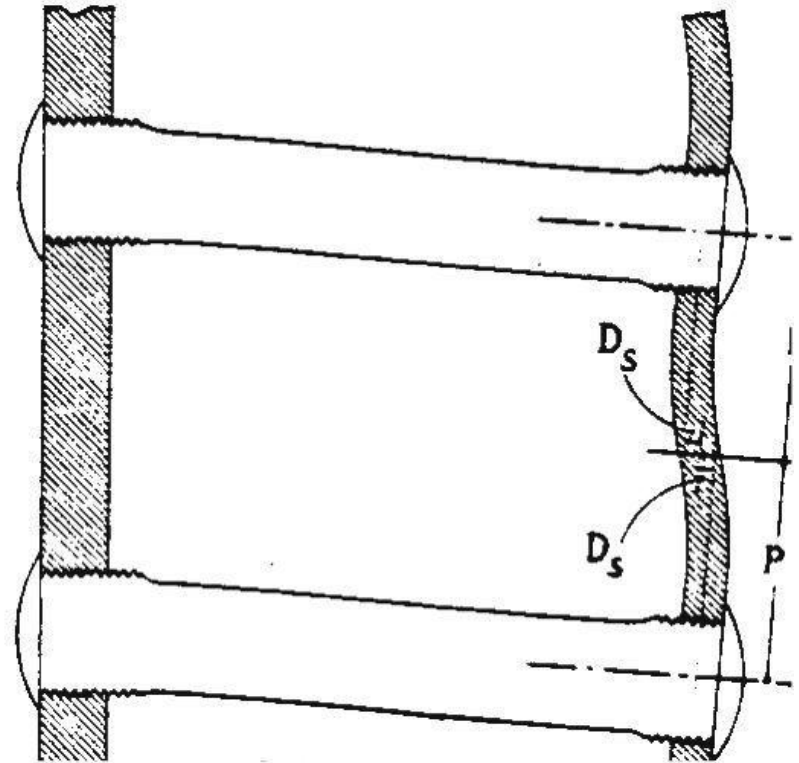


Fig. 41. Flexible Stay-Bolt.

So, would this type of bolt alleviate our deformation problem?

Tune in next time to catch the continuing saga of stay bolts!!

Take care,
Dave



HAPPENINGS PAST!

September 28, 2019

Boy Scout Troop 526 came out to assist with tree trimming and weed removal.

Photos by Dan Benton



(continued next page)

BOY SCOUTS (cont'd)

BEFORE



AFTER



WHILE WORKING



(continued next page)

BOY SCOUTS (cont'd)



The entire crew, resting after a long, but very rewarding, day.
A sincere and grateful **THANK YOU** from the MLS Board of Directors for your help.



(continued next page)

BOY SCOUTS (cont'd)

Adobe City, East Yards,
Adobe Station area
and Friendship Park –
lookin' mighty fine,
MIGHTY FINE!

A sincere and grateful
THANK YOU from the
MLS Board of Directors to
everyone who came out to
help with the "gardening."
THANK YOU, ONE and ALL.



From the Desk of: Perry McCully – Facility Administrator
Subject: September 28, 2019, Work Party

I called for a work party to clean up the park and trim trees. I'm so happy to report that I had a great amount of help with both projects. The park was cleaned up in only 5 hours, and now it looks brand new. I would like to extend a sincere **THANK YOU** to everyone who came out to help. Pieter Pennarts asked Boy Scout Troop 526, who we sponsor, to come out to help, and they did a fantastic job. Also, **THANK YOU** to members John and Sondra Broughman, Bill Cobb, Joe Fego, Cliff Fought, Tim Freeman, Paul Lator, Rich Mock, Pieter Pennarts, Ed Houk, Bob Rauperstauch and Dan Benton. I hope I didn't miss anyone. Thank you all so very much.



Pieter Pennarts and Cliff Fought working on the cover for the North Pole display.



Joe Fego (left) and Rich Mock (right).

HAPPENING NOW!

<https://www.up.com/heritage/steam/schedule/index.htm>

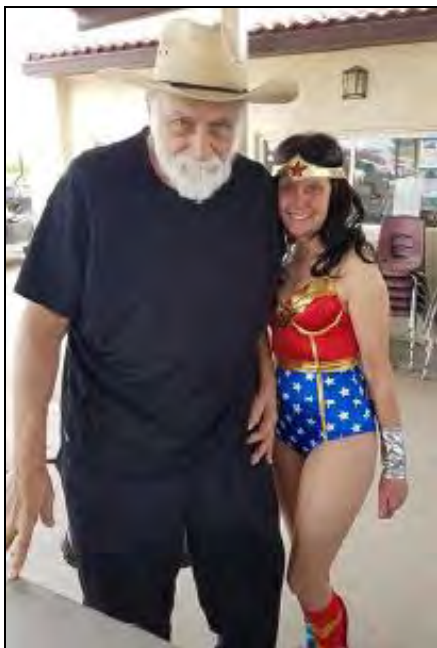


Photo by Bob DiDomenico

Click photo for article and schedule.

The very last **Big Boy** in operation will be in Yuma on Oct. 15-16, passing through Casa Grande on Oct. 16-17, at Tucson Historic Depot on Oct. 17 between 10 – 10:30 AM, and on display in Tucson on Oct. 18 between 9 AM – 3 pm

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This year, on Friday and Saturday night October 25th and 26th, we are having our first-ever Family-Friendly Halloween Train Ride program. We are planning to put up the Megatree a little earlier this year and program it to play Halloween music. Mick Janzen and Jim Zimmerman have decorated Adobe Station with LED's from the Megatree that are programmed to give riders a dancing light show while boarding their train. Pete Pennarts built projector boxes for the renovated North Pole to transform it into a haunted house. And Hank Gallo will have the singing faces and his singing pumpkins performing Halloween themes. If anyone has Halloween decorations that they can loan us, please let Hank know ASAP. Donors can retrieve their decorations on Saturday night or Sunday, Oct. 27th in time for their family's Halloween at home.

HALLOWEEN TRAIN RIDES

by Hank Gallo

We need many volunteers to make this happen, if it turns out to be as popular as the Holiday Lights. If we can get enough volunteers for October 25th and 26th, then we can advertise the Halloween Rides. Our guests truly enjoyed the Trains and Fireworks Program and have asked about Halloween. As Mick "Wonder Woman" Janzen suggested, if you want to wear a costume, that would be even better. So everyone is encouraged to wear a costume, like the children of our guest riders will certainly be doing, but it's not required. If you can help crew the trains / work the gates or gift shop, please email me at hanksgt@yahoo.com ASAP. **THANK YOU. – Hank**

Fall Meet 2019



Work Week – Oct 21st thru 27th
Meet Week – Oct 28th thru Nov 3rd

Please find the Fall Meet information on the next page and the registration form at the back of this newsletter.

Please don't forget this, if you are coming to run trains.

From the Desk of: John Draftz
Subject: Mini-Operations Switching Session

The following information is provided for any participants who may want to take part in the planned switching session during the Fall Meet. If you have any questions, feel free to contact me at jzdraftz@cox.net.

The MLS will conduct a mini-Operations switching session as part of this year's Fall Meet. This will allow crews without operations experience to learn how to do switching, but at a much simpler level. It will also give experienced crews a challenge.

The format is that a crew will take two cars from the yard and spot them at the correct locations on the railroad. The crew will pick up two cars on the railroad at predefined locations and bring them to the yard. The crew will also move a car from a predefined location on the railroad to the correct other location.

The orientation meeting will be Monday, October 28th at 4 pm. Actual switching will be done between 8 AM and 5 pm on Tuesday & Wednesday, October 29th & 30th.

Peddler freight: a local freight train that switched cars at various privately-owned or company-owned sidings. It might take all day just to move a few miles depending on the number of switching moves the crew had to make.



ENGINEER CERTIFICATION
This certifies that

IT'S EASY TO GET YOUR NAME HERE
is a certified engineer at the Maricopa Live Steamers



This certification expired on **May 31, 2019**

PLEASE CLICK

[MLS Safety and Operating Rules](#) (printable PDF format)

[MLS Online Engineer's Test](#) (online entry, auto-submission)



Fall Meet 2019

Work Week – Oct 21st thru 27th

You are invited to participate in the Fall Meet, which will be held October 28th – November 3rd, 2019, at Maricopa Live Steamers in Phoenix, AZ. This is an open invitation meet, but everyone attending must pre-register regardless of their participation.

If you are bringing your spouse, girlfriend, children, etc., they must also be pre-registered, even if they DO NOT plan to participate. **During the week of the Meet only**, the following meals will be provided.

Please note, you must pre-register and pay for the PotLuck Dinner by October 27.

Please use the registration form at the end of this newsletter.

Please RSVP as soon as possible with a check or money order.

We look forward to seeing you in October.

We use FRS radios with assigned channels from 3-10 with privacy code 10. Exact channel assignment will be listed in the operation time table. You will also want to bring a flashlight, warm clothing, rain gear (it does rain in Phoenix occasionally) and anything else you think you may need.

Track plan information can be found on the MLS website, as well as a map to MLS. RV parking and dry camping is available October 21st through November 3rd.

Upon arrival to MLS, please check-in at Ford Station to pick up your information packet.

Meet Week – Oct 28th thru Nov 3rd

A continental breakfast of coffee and donuts will be available on Wednesday, Thursday, Friday and Saturday at the nominal cost of \$2.00 per person cash only.

Lunches will be available Wednesday, Thursday, Friday and Saturday at the nominal cost of \$7.00 per person cash only.

Dinner on Friday will be potluck. If you choose **not** to bring a dish for the potluck, there will be a \$10 charge per person, which must be **prepaid** with your Registration Form.

Maricopa Live Steamers is one of Phoenix's natural county parks. There are coyotes, rattlers and other critters living here. We ask that you not bring pets for safety's sake. If you do so, your pet must be on a leash at ALL times. This rule is a county park rule. If the county sees disregard of the rules, they will tell us to pick up our track and go home. We don't want that to happen, do we?

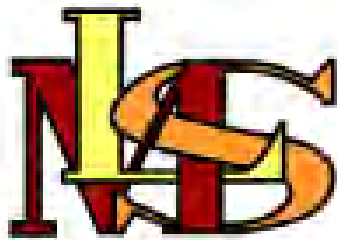
For more information, visit www.maricopalivesteamers.com.

Any questions please contact:

Belinda Kulman at bkulman09@gmail.com

or Donna Hohm at donnahohm@yahoo.com.

Thank you.



Maricopa Live Steamers
 2019 Fall Meet
 Registration Form
 Monday 10/28/19-Sunday 11/03/19
Work week begins Monday 10/21/19-Sunday 10/27/19

Pre-register by 10/21/19

Name as you want it to appear on your name tag: _____

Additional family members: _____

Address: _____

Cell number: _____

Email address: _____

MLS has now opened 1500ft of 4 1/4" gauge track. Please check the box if you are bringing any 4 1/4" equipment

*All steam engines must have a current boiler inspection and solid fuel engines must have spark arrestors.

*All steam engines under fire must not be left unattended.

*All train operators must attend 1 safety meeting.

*RV's are permitted 10/20-11/03 Dry Camping only, no water, no electric, and no sewer.

*No discharge of any water on the ground.

Pot Luck Dinner will be Friday 11/01/19 at 5:30

*I will participate in the pot luck dinner: Yes: _____ No: _____

Item	# Of people		Cost		Total
NO DINNER MEALS WILL BE AVAILABLE					
Pot luck Bring a food item or pay \$10.00		X	\$10.00	-	\$ or food item
Registration Administration fee Non refundable		X	\$5.00	-	\$
Each additional family members administrative fee Non refundable		X	\$2.00	-	\$
Total enclosed with RSVP					\$

****Breakfasts and lunches will be served Wednesday through Saturday 10/30-11/02****

Continental breakfast of coffee and donuts will be served at a cost of \$2.00 per person

Lunch and a drink will be served at a cost of \$7.00 per person cash only at the door

ALL ATTENDEES MUST ATTEND ONE SAFETY BRIEFING.

Briefings will be held on Wednesday through Saturday at 8:30am and 1:00pm

ALL COUNTY RULES IN EFFECT. ALL DOGS MUST BE LEASHED!

Please mail this form along with a check or money order payable to Maricopa Live Steamers to:

Donna Hohm
 10705 North 109th Way
 Scottsdale AZ, 85259

Any questions contact:
 Belinda Kulman: bkulman09@gmail.com
 Donna Hohm: donna Hohm@yahoo.com



2020 MLS Annual Membership Form

Please complete this application and mail it to:

Maricopa Live Steamers
Attn: Membership Committee
22822 N. 43rd Ave
Glendale, AZ 85310
donnaohm@yahoo.com



2020 dues can be paid between October 1st 2019 and December 31st 2019.
They must be paid by December 31st 2019 to be included in the 2020 Roster

All MLS members over the age of 18 are charged a Park Usage Fee of \$10.00 which is included in your dues. Your annual dues support club operation and facility maintenance only. All club improvements and railroad expansion are supported by public and club member contributions, which are tax deductible.

Anyone with personal equipment stored on MLS property must pay Resident Membership dues.

Renewal or New membership:	PAYMENT
Resident Membership _____	\$170 _____
Spouse Membership _____	\$35 _____
Junior Membership (\$10 per child) _____ Qty _____ X \$10 _____	
Non-Resident Membership (more than 75 miles from Phoenix)	
Single Membership _____	\$40 _____
Spouse Membership _____	\$35 _____
Junior Membership (\$10 per child) _____ Qty _____ X \$10 _____	
Stand-alone Junior Membership (must have a sponsor)	
Sponsor's Name _____	\$40 _____
Optional Fees	
Club Locomotive Use Fee (First Year Only) _____	\$150 _____
Annual Locomotive or Rolling Stock Use Fee _____	\$50 _____
Name Badges can be purchased for \$10.00 each _____ Qty _____ X \$10 _____	
MLS is in the process of upgrading the track and switches to steel rail and plastic ties.	
Please consider a tax deductible donation to the Track Maintenance Fund: _____	\$ _____
TOTAL PAYMENT \$ _____	

The following information will be used to produce a membership roster. It is not made public and is only distributed to MLS members. HAS ANY OF YOUR INFORMATION CHANGED IN THE PAST YEAR? Yes No

Member Name: _____ Email: _____

Member's Cell: _____ Junior Member Name (s): _____

Spouse Name: _____ Spouse Email: _____

Address, City, State, Zip: _____

Home Phone: _____ Club Key # _____