## Greetings!

This is your Maintenance of Way Team update for January 7, 2018. It is the dawn of a new year and your MOW Team is ready to go gangbusters. So, let's not dampen that enthusiasm by delaying the start of this update any further.

Pat Scholzen, Cliff Hayes, Chris Howard, Mike Harris, Joe Margucci, Gene Peck, Chris Carlson, and Heather Kearns all were on hand Tuesday for the first gathering of the MOW Team in 2018. Cliff, Gene, and Pat got to work right away on repairing and straightening several draw-bars used for towing equipment. Over recent months, these draw bars became overstressed from pulling ballast hopper-cars which carry several tons of rock each. For the bent draw-bars, Cliff heated them up with the torch while Pat and Gene pounded on them with sledgehammers. Then Cliff fabricated new connecting points on one draw-bar which he welded on to it. Over at the tie-shear, Mike H. and Joe put the Porta-Power hydraulic ram together for use in removing the pins that hold the kicker-cylinder in place. This particular cylinder needs to be removed and sent out for repair. The MOW Team's own "MacGyver", Joe, built a brilliantly improvised funnel for filling the Porta-Power with hydraulic fluid using a Styrofoam cup, half a pen, and some painter's tape. Next, they worked to secure this rather massive cylinder so that it wouldn't fall in the pit once the pins were removed. Chris H. reinstalled the gas-tank on the derrick-crane car while Chris C. worked on refitting its carburetor. Indeed, the progress made on Tuesday was a fantastic way to start the new MOW year!

Thursday, Alan Hardy, Chris H., Heather, Mike Willis, Matt McCracken, Mike H., and Frank Werry came to continue the MOW momentum. Mike H., Chris H., and Alan were motivated to get the faulty hydraulic cylinder for the tie-shear's kickers out of the machine. With Alan on the forklift, Mike H. and Chris H. strung a strap through the machine to attach to the cylinder. Matt valiantly agreed to climb down into the pit under the machine which, after recent rain storms, was partly filled with oily-water, to secure the kickers in the upright position. To protect his steel-toed boots and pants, Matt used plastic garbage-bag as waders. They were really quite stylish and could possibly become a trendy new fashion statement! Crouched under the machine, Matt used a chain to tie the kickers up. Then Mike H. pushed out the pins holding the hydraulic cylinder with the Porta Power. Heather brought the MOW truck around onto which the cylinder was loaded. Meanwhile, Mike W. finished restoring the Interpretive Hand Car Program's MT-14 motorcar to service. After a great deal of work, Mike W. managed to get the machine started for the first time in two years. After a few fits and starts, he soon had it purring like a kitten – well, perhaps lion. This is great news as it can now be returned to the Handcar folks for use this spring. Yes, another good evening of significant progress for your MOW Team.

Saturday was a sort of a "catch-as-catch-can" day for the MOW Team as the equipment in the container is still not accessible. Two ballast hopper cars have damaged draw-bar connectors. The tamper is out of service with a wonky vibrator motor and leaky hydraulic cylinder. But, there were plenty of doughnuts on hand to get Chris H., Harry Voss, Bill Hastings, Steve Nemeth, Pam Tatro, Alan, Michael Florentine, Heather, Chris C., Matt, Kyle Blackburn, and Bev Ratzlaff fired up for a fun day at MOW. The Team would get the tamper back to the Shops for repair. To make room in the Erecting Shop, we'd send the tie-shear and scarifier over to Old Sacramento. Mike F., Steve, Pam, and Bev headed to Old Sac. to get the tamper ready to roll. Chris C., Alan, Matt, and Bill prepped the shear. Matt, once again, was conscripted to descend into the pit to secure the kickers for travel. But, it gave him another opportunity to sport his stylish garbage-bag waders. With the shear and scarifier ready to roll, Conductor Heather arranged a quick passage across the UP Main. In Old Sac., several switching moves had to be made, including spinning the tamper on the turntable, to get it and the two damaged ballast hoppers over to the Shops. Steve piloted the tamper as Conductor Heather again secured a speedy green signal indication from Omaha. Chris C. and Matt spotted the tie-shear and scarifer on the 150 Track. Meanwhile, back at the Shops, Kyle employed his welding skills on a large list of projects. For the Sutterville/Zoo Line project, an "end-of-track" marker needed to be installed. So, Chris H. modified a "blue-flag" marker by replacing it with a "red-flag". It would be fitted in the afternoon.

Speaking of the afternoon, the Team would head to Sutterville Road to install the "end-of-track" marker. But, also, they'd use the opportunity to remove that broken stick of rail that the Team replaced back in November. It had been sitting between the rails preventing the ballast regulator from doing its job south of Mile Post 3.5. In Old Sac., the Team opened up the Kalamazoo tug and attached two flatcars to it for hauling the rail. Chris H. would get an opportunity to operate the tug with Mike F. as trainer. At Sutterville Road, the "end-of-track" marker was placed straddling two ties. Matt set the spikes. Then, the MOW Team's original tandem spiking squad, Steve and Mike F., drove the spikes deep into the wood with a spike-maul. Clearly, these two could have kept up with the best of the Central Pacific's spike-driving teams in 1868. With the marker in place, the Team turned its attention to the broken stick of rail. Using two-handled rail-tongs and combining their efforts, Bill, Bev, Matt, Chris H., Steve, Heather, Mike F., and Chris C. lifted the 33-foot long stick of 75-pound rail onto the flatcars. Chris H. and Mike F. then hauled it north to Front Street to add to the pile of 75-pound rail stored there. At Front Street, the Team again employed two-handled rail-tongs to remove the rail from the flat cars. Then, Mike F. used a rail-fork to roll the rail over to the pile. Bev, Bill, Matt, and Chris H. assisted while engaging in the latest dance craze – the "rail-roll" as they used their legs to help push it towards the pile of stored rail. With that, the Team headed back to town to stow the Kalamazoo and flatcars before returning to the Shop. Lest we forget, while the rest of the Team was out on the line, the diligent Kyle spent the entire day in the Shops working on welding projects including rebuilding the draw-bar connectors on the two hopper-cars. He did a fantastic job and is proving his formidable welding skills. Many thanks, Kyle!

Speaking of diligence, this coming week, the highly motivated and dedicated MOW Team will be gathering as usual at or before 5 o'clock on Tuesday and Thursday in the Erecting Shop. Saturday, the plan is to take a light locomotive down the Sutterville Line for testing purposes. Meet at the Shops at 8 o'clock a.m. to join the fun. Many thanks to all the valiant MOW volunteers for your dedication to building a better railroad!

See you out on the line,



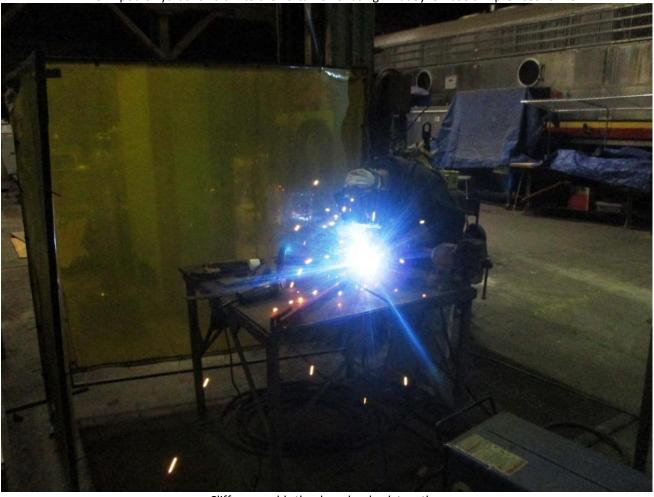
Cliff grinds the old, broken welds off of a draw-bar



Chris H. installs a new valve on the derrick-car's gas-tank



Mike H. pours hydraulic fluid into the Porta-Power using "MacGyver" Joe's improvised funnel



Cliff now welds the draw-bar back together



After filling the cylinder with fluid, Mike H. and Joe get the Porta-Power hydraulic ram put together



Under the tie-shear, the rather hefty hydraulic cylinder and pin that need to come out



With Alan on the forklift supporting the cylinder, Mike H. and Chris H. work on removing the pin holding the cylinder in place



Mike W. gets the Interpretive Handcar Program's MT-14 motorcar started for the first time in two years



Matt has created a new fashion statement that will soon be all the rage amongst the kids



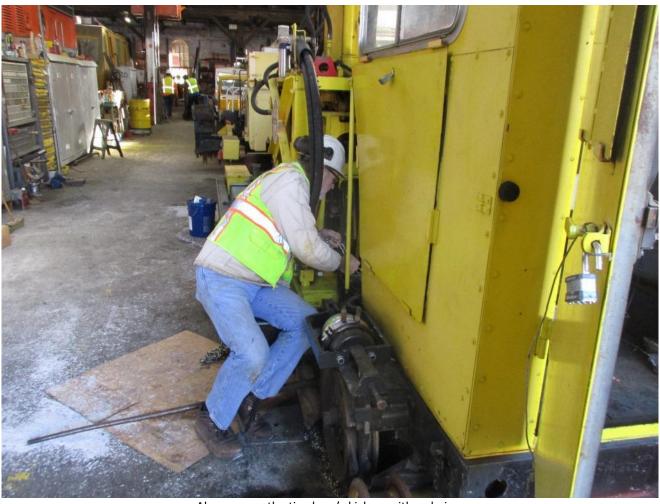
But, they have a practical purpose, as well, as Matt demonstrates as he chains the tie-shear's kickers into place



Wille W. and Wilke II. pry-out the tie shear 3 kicker frydraulic cylinder with a filling bar



Chris H. converts a "blue-flag" marker into a "red-flag" marker which will be placed at the end-of-track at Sutterville Road



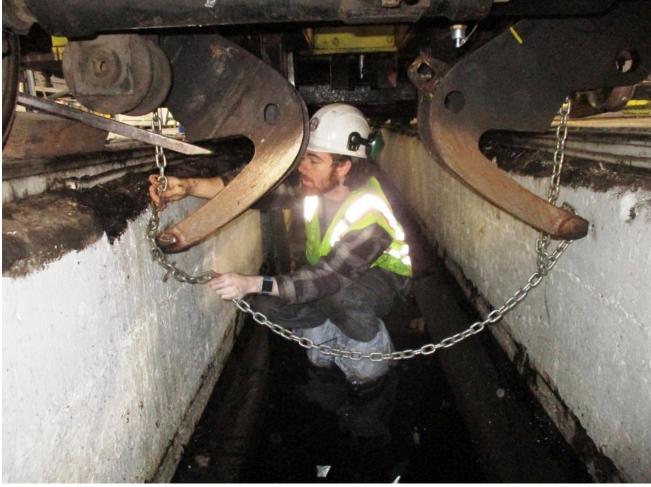
Alan secures the tie-shear's kickers with a chain...



...While Bill and Chris C. bind it from the other side



Once again, Matt's headed into the "pit of despair" to undo what he did on Thursday...



...Because the kickers needed to be dropped to remove an extraneous piece of metal (kicker on the right) preventing it from raising all the way



Alan sparks-up the torch to cut off that extraneous piece of metal



Meanwhile, Kyle spent the day taking care of a number of welding projects we had lined up for him



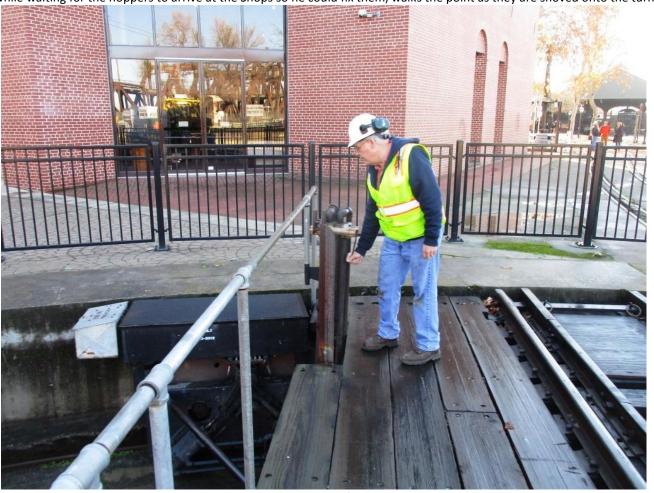
Following Conductor Heather's successful negotiation with UP Dispatcher "Mad-Dog" in Omaha, the shear and scarifier arrive in Old Sac



Mike F. guides the tamper in for a hook with the wonky ballast cars  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 



Kyle, while waiting for the hoppers to arrive at the Shops so he could fix them, walks the point as they are shoved onto the turntable



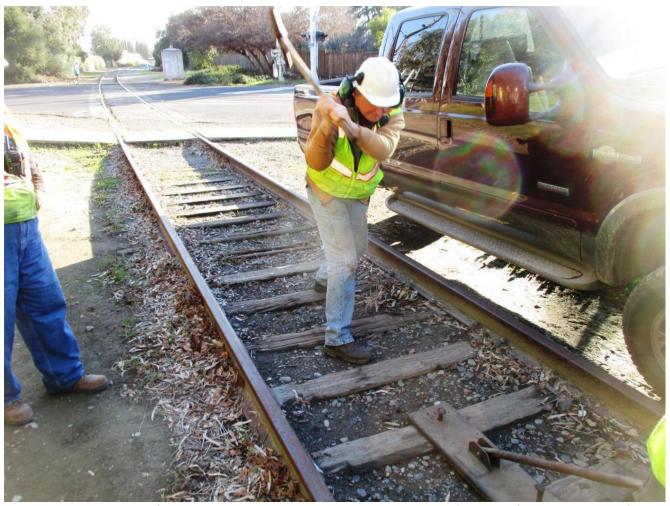
Bill takes the tamper and hoppers for a spin on the turntable



Finally, after multiple switching moves, the tamper and hoppers arrive back at the Shops. Now get to work, Kyle!



After lunch, Bev supervises as Matt sets spikes on the "end-of-track" marker at Sutterville Road



Steve demonstrates his world-famous as seen on TV windmill spike-driving technique (being careful not to hit Chris C.'s truck...)



Mike F. makes quick work of the other spike



Chris C. stands beside the new "end-of-track" marker at Sutterville Road



Using two-handled rail-tongs, the Team combines efforts to lift the busted rail onto flatcars





Heather, Bill, and Mike F. secure the rail to the flatcar with a strap



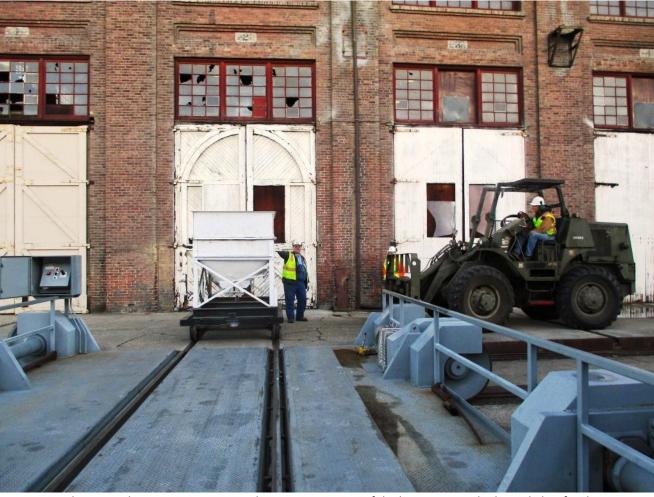
At Front Street, the Team again lifts the rail from the flatcars



Mike F. uses a rail-fork to roll the rail over to the pile



Bev, Bill, Matt, and Chris H. demonstrate the latest dance craze: the "Rail-Roll"



Chris C. guides Steve on Green Machine 2 to move one of the hoppers outside that Kyle has fixed