Greetings! This is your Maintenance of Way Team update for March 15, 2015. "It was the best of times, it was the worst of times." That fateful phrase from Charles Dickens's 1859 historical novel, *A Tale of Two Cities*, aptly describes the MOW Team's week. Progress was made on some fronts while suffering several setbacks. So, let's get the update started before Madame Defarge completes her ominous knitting...

Tuesday was a "best of times" evening with Alan Hardy, Pat Scholzen, Heather Kearns, Frederick Carr, Mike Harris, Steve Hall, Frank Werry, and Gene Peck were on hand in the Shops all making progress. A new hydraulic pump for the rail-lifter arrived and Pat and Gene managed to install it. The rail-lifter, which has been out of commission for quite some time, will end the need to hand-nip rails in order to place tieplate. Team Tie-Shear was headed up by Fred this week. The Team reinstalled the shroud over the engine which has the muffler and smokestack mounted to it. Mike H. descended into the pit under the Kalamazoo tug to service the transmission. The transmission fluid was low and, despite cramped-conditions, he managed to access the ports necessary to add oil. Then, Mike H. found a nasty looking hydraulic hose which he managed to remove. Heather took all the measurements and had a new one made.

On Thursday, Heather, Fred, Cliff Hayes, Alan, Frank, and Gene gathered in the Erecting Shop. Gene and Mike H. spent the evening working on the Kalamazoo. A couple of issues had emerged. Mike H. got under the machine again and replaced the bad hydraulic hose. Then Gene discovered that the bolts binding the transmission to the engine were loose. For obvious reasons, this could be problematic. So Mike H. and Gene set out to tighten those bolts down. This was not an easy task. But, by the end of the evening, Mike declared the Kalamazoo "in service!" Cliff began designing the new window shields for the tie-shear. Frank and Alan loaded a bundle of ties on a flatcar and another on the Green Machine to take to Old Sacramento on Saturday. Loading a bundle of ties on Green Machine proved prophetic.

Throughout the week, the Team spent a good deal of time planning for Saturday's operation. It was going to be a big day – our most mechanized tie-pulling operation to date. The goal was the replacement of 60 bad ties down on the line. Saturday started off great with our Designated Supervisor of Doughnut Disbursement, Harry Voss, supplying the Team. Joining Harry were Alan, Clem Meier, Michael Florentine, Heather, Steve Nemeth, Mike Miller, Frank, Ed Moriarty, John Rexroth, and Mike Willis. Following the briefing, the crew headed to Old Sacramento where Ed and Mike M. deployed the motorcar consist, Heather piloted the scarifier-inserter, Steve N. the Tamper, and Mike F. the Green Machine. Over in the Rail Yards, Alan in the Kalamazoo, pulled a tie-laden flatcar, the spike puller, and rail-lifter. He and Conductor Frank were waiting for a green indication to cross the UP Main. Then, fate intervened. The Union Pacific was experiencing a regional failure of its dispatching computer system. Signal indicators from the Bay Area to Roseville were RED. Without the equipment from the Shops, we could not fully implement plan. So, the EIC called an "audible" and decided to cancel the tie-pulling part of operation. Instead, the Team would focus on inserting ties into the remaining empty cribs from last week's tie changing operation.

At the worksite, Clem began collecting tie-plates from the ties pulled last week. Mike M. and John unloaded the ties that had been delivered by Mike F. with the Green Machine. Heather, in the scarifier, carefully dug out the empty tie-cribs and then used the inserter function to pull new ties into place. Ed, Mike M., Mike W., Steve N., filled-in ballast rock around the new ties. Then Steve N, in the tamper, tamped all 30 newly installed ties. Meanwhile, up north, Conductor Frank arranged with Omaha for 20 minutes of "track-and-time" to move the equipment over the UP Main. This required the manual operation of the two derails on the Interchange Track – a first for any SSRR crew since they were installed in 2012. Frank figured out the system and got the equipment over the UP Main within the 20 minutes allotted. By the time they got the worksite, the tie insertion work was nearly done. They deployed the rail-lifter which made the task of plating much easier. Steve, Heather, and the three Mikes used the pneumatic spiker to drive spikes. By quitting time, 30 new ties were in the ground.

Now, to "the worst of times." A cascade of equipment failures – and an ensuing logistical nightmare – plagued us in the afternoon. The scarifier suffered a catastrophic engine failure that could sideline it for months. Fortunately, Heather was at the controls and wisely knew not to apply the brakes which would have depleted the compressed air from the system causing the brakes to seize. After a good deal of contemplation and discussion, it was decided to try to shove the scarifier with the Jackson 125 tie-exchanger. Fortunately, the air held. Back in Old Sac., Alan, Frank, and Mike F. were all prepared to take the Kalamazoo, flatcars, and the Weed Team's 500 gallon spray rig over to the Shops (the UP had resolved its computer problem). With the dead scarifier now in the mix, a whole new switching plan had to be devised. To make matters worse, the Kalamazoo was teetering on engine failure and we weren't sure if it was even capable of pulling anything up and over the diamonds. Then, to add insult to injury, the A-6 motorcar's engine died, probably the victim of vapor-lock. It was stuck out on the main with all the work-cars behind it. Alan, Heather, Frank, and Mike M. managed to coax the Kalamazoo pulling the rig and scarifier over the UP Main while Ed, Mike F., Mike W., Harry, and Steve dealt with the dead A-6 and equipment using the MW51 motorcar. Another series of complex switching moves got the equipment off the line and put away. Thus, our 12 hour day came to a close.

At this point, we're unsure of the extent of the scarifier's engine problem but, it looks bad. The Kalamazoo's problem appears to be relatively minor. By Sunday, the A-6 was running again. Yes, the breakdown of the scarifier is a major set-back. But, as our hearts are pure and our cause is just, we shall persevere. If nothing else, the day did prove that this Team can handle multiple out-of-normal situations quite competently. Despite the disappointments, we did manage to get 30 ties in the ground making it a good and productive day after all.

This coming week, the Weed Team will be gathering on Tuesday for more weed-killing activity. In the evening on Tuesday and Thursday, the Shops Team will meet at or before 5 o'clock p.m. Saturday, we will re-group and pick up where fate left us off last Saturday. To the valiant crew on Saturday, your perseverance through adversity was inspiring. Many thanks for all your *above-and-beyond* efforts!

We'll see you out on the line,

Alan, Chris, and Richard.



Fred awaits the shroud, muffler and smokestack (which is hanging by a chain from the stinger on the forklift to the left) for re-installation on the tie-shear.



Alan on the forklift while Steve H., Fred, and Frank get the shroud and muffler into place.



Frank guides as Alan maneuvers the rail-lifter around the Erecting Shop .



Mike H. down in the pit under the Kalamazoo searching for a pesky hydraulic leak



With the UP's dispatching computer system in Omaha off-line, Conductor Frank and Alan in the Kalamazoo waited for what seemed an eternity on the Rail Yards side of the Mainline



Meanwhile, down at the worksite, Clem locates and tosses tie-plates out of the way so that they wouldn't get buried by the scarifier.



Mike M. and John drop ties off the flatcar next to empty cribs.



Heather in the scarifier-inserter pulls in a new tie guided by Mike M. and John.



Ed, Mike M., and Steve N. fill in ballast around the newly inserted tie in preparation for tamping.



The rail-lifter finally arrives after being delayed by the UP's computer problems. Ed, Mike F., and John get it into position.



Mike F.'s skillful touch raises the rail just enough for Steve N. to insert a tie-plate.



Heather captures the action while a quorum of Mikes – Mike F., Mike W., and Mike M. – plate the east rail.



Heather guides the air hose from the compressor while Mike M. uses the pneumatic spiker to drive spikes.



"Hospital train": Mike M. in the Jackson 125 shoves the dead scarifier/inserter back to town. Heather's in the cab calling the shove.