Mechanical Department Report
November 8, 2019
Acting CMO DS Elems

Once again, I'm late getting this written up. I've been writing up and keeping track of the evaluation on WP512 up to this point but that has been about all the writing I've had time to do these last couple of weeks. For the last month or so I've been able to come over to the museum in the mornings before work for three or four hours before having to head back to Reno, which has allowed me to get a lot of things done around the museum, though admittedly not as much as I'd like. The uncomfortably warm weather this past week has allowed us to get a lot done around the museum though, and I can remember past Novembers were things went much slower because of the cold and rainy or snowy weather. With a continued warm and clear forecast for the next week or so I hope we can continue with our momentum.

Since the final Pumpkin Patch Express the cabooses have been getting prepped for Santa Trains by Steve Habeck, and the SN 1642 has continued to be worked on by Greg Elems and Loren Ross which now sports some brown paint. Ethan Doty and the Pumpkin Patch/Express crew have been cleaning up the decorations from the event, and Bob Sims has been getting the windows sealed up on the Silver Hostel. While those efforts have been ongoing I've been working on the evaluation of WP 512, planning the seasonal prep/inspection of the rotary set, contemplating shop cleanup, thumbing through inspection reports, and mulling over some thoughts on the oil house and oil separator, the latter two items being discussed in my safety report.

As we rapidly approach Santa Trains there are several things yet to do to our planned power for the train, WP1503 and SP2873. While the October festivities were a great break in for 1503 they also brought to light a few things that still need to be taken care of on the unit.

WP1503

From my perspective, for what that's worth, we had a successful two Pumpkin Patch weekends part of that being the debut of WP1503 in operation. The locomotive performed as well as expected, though there are still a few quirks that our crews will need to get used to. Additionally, and certainly not unexpectedly, various minor issues came to the surface that still need to be addressed.

Some of the startup procedures and components are different enough to be unfamiliar to some of our Ops. Personnel, and on top of that I think there are still some gremlins left over from when the unit had all the special wizardry installed (and gutted before arrival) which occasionally seem to crop up on startup and shutdown. To that end I plan to create a sufficiently comprehensive document on the watering, draining, starting and shutting down of the locomotive as well as some of the various components that need attention at startup and shutdown. I'll also be writing up a document for the proper use and procedures of the cab heaters; while expectedly simple devices I'd rather not take chances with them at 3.3kW apiece.

As for the minor maintenance issues, everything seems to mostly be issues with old electrical components; a few worn out slide switches, burned out light bulbs, a sticky selector switch, and finally the troublesome rear headlights. I know we have the switches in stock and I'm pretty sure we have all the light bulbs I need. The biggest headache is going to be figuring out were all the voltage is going (or not coming from) in regards to the rear headlights. At the moment there is little change from dim to bright, and even when set to the latter you couldn't read a switch list by the light after more than five feet from the locomotive. At least 1503 has ditch lights.

SMPW 208 & 8221

I've been planning the work for the rotary set for the past few weeks and should hopefully have something like a schedule to post in the next week, along with work for WP512. So far all that has been done with the plow is a pit inspection. We were able to get all but the front two thirds of the front truck of the A-Unit over the pit, and I was able to contort enough to give a sufficient visual inspection of the rest. A visual inspection of the underframe, center sills, framing, trucks etc. was completed on the set and no major issues were found.

The wheels and trucks were all in good shape, the exception being two of the elliptical springs on the bolster of the snails rear truck; center two of the right hand spring pack. I'd guess that they've been broken since long before we got the equipment, and none of the surrounding springs seem to be affected or in any sort of compromised condition, but since we are now aware of it we'll be keeping an eye on that side of the truck. Everything else that I looked at was in good shape considering the age and type of service of the equipment. With the rebuilds and upgrades the axels on the A-Unit are much thicker than when built and the front brake beams ride a little on the axle so some adjustments may be needed but again that has probably been like that for some time (the 80's perhaps?). The brake beams and rigging as built hang quite low (below the bottom of the plow wheel housing) and I'm surprised they haven't snagged anything but it would seem that they have exactly the right amount of clearance. The number one main reservoir on the snail has also had its drain/blow down line pinched and brazed, so a new line is going to need to be installed.

Ethan is working with me on making a proper annual inspection worksheet for the rotary set. While the standard locomotive form worked, there are a few items that need to be inspected on the rotary set that are unique to it and had to written in in the notes and comments section or the appendix. Aside from the completed pit inspections the rotary will need a full annual inspection for the season before any use this winter.

Radiator Work

I've continued to put off the testing of the radiators provided by Roger Stabler, but at least I've now made the flanges needed to test them. Hopefully I can add that to the list of completed work this month while the temperatures stay warm. At this point I doubt that I'll be doing any radiator swapping on SP2873 until the spring.

Non Locomotive Work

Things have slowed down a little aside from the more routine maintenance/servicing of our "rubber tire fleet." We are waiting to get the components to finish the Yale forklift, which Bil has been handling, and we still plan to try and work on the white forklift sometime in the spring. The only other new and noteworthy issue is that one of the light plants had an issue with the oil sending unit, or the circuitry it's wired into, and a temporary solution had to be made while parts and information are continued to be sought; again this is being handled by Bil.

As usual, the Dodge continues to have issues loosing fuel prime if left to sit too long. The brown Ford continues to be the brown Ford. The white forklift soldiers on in spite of itself and its continual use.

This Month & Beyond

As mentioned above, we're gearing up to start the annual inspection of the rotary snow plow set, and I've been working on the evaluation of WP512. Aside from some work with Facilities and the Safety Department, that is all I've got planned for the next two months aside from hopefully cleaning up and organizing the shop. We'll also be working on prepping for the Santa Train weekends. While things wind down around the museum there is still plenty of activity and lots to do.

In regards to 512, I finally finished up the pit inspections on Wednesday, so the rest of the evaluations will be completed outside the shop. So far things are looking good, and the next thing I plan to do is continuing my attempts as cleaning the engine block and the engine room floor. Charlie Spikes started vacuuming out under the main generator yesterday morning and things seemed to be going much easier than I had expected. I spent most of this week cleaning out the traction motors, which all had old rat and other rodent nests in them, which made completing the inspections difficult with all the fuzz scat packed into them. As we clean things up/out things are looking to actually be quite good, so the long period of disuse and habitation by the local fauna hasn't seemed to had any appreciable negative effect. Once things are degreased and cleaned off I'll start pulling covers and hatches for a comprehensive inspection of the engine, after which the locomotive will receive a complete annual inspection following the standard worksheets.

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Inspection & Service Schedule

The current rotation of locomotives through annual inspections and return to service in order is as follows, effective dates are non-projectable:

1. SPMW208: Annual inspections and pre-winter preparations.
2. WP512: complete evaluation and annual inspection.
3. SP2873: Swap leaking radiator bank with good radiators (following evaluation of new-to-us radiators).