## **WP 165 FALL PROGRESS**

- Chris Allan, Steam CMO

The 2011 Season for the Steam Department has ended, and we can be proud of our accomplishments over the past year. The lion's share of the work was toward our 1472 day FRA inspection, with all but a very few of our ultrasonic thickness readings on the boiler shell completed by Nathan Osborn and James Cowdery. Nathan has also been meticulously transcribing the thickness readings into a format that is more "user friendly".

We welcome new steam team member Dick Coudin, who I met onboard Roger Stabler's private car "Two Rivers" on the Railroad Days Special to Portola in August. Dick met me in Woodland on Tuesday the 27th of September, and together we motored back over the hill to Portola in time to get moved into the Pullman before dinner.

Wednesday we were joined by Steve Lee, in from Cheyenne to lend a hand and help us get through our initial FRA boiler internal inspection. The inspection was to take place on Thursday, but was cancelled Wednesday evening by the inspector for reasons beyond his control.

We will reschedule in the spring of 2012, and continue on with boiler work in the meantime. Roger Stabler arrived about this time, and got to work on the base of the cab, welding up what Erin Swain had tacked in place during the summer work session. Dick drilled out for the rivets along the bottom of the sides. These will be driven into place, hopefully, in the spring. Thanks to Roger and Dick for finishing up around the base. All that remains is to patch the drip rail areas on the roof. Charlie Spikes has the cab mounting brackets pilot drilled. Those will be finished off with the magnetic base drill after the cab is in place. He has also been systematically cleaning up the driving boxes over the summer. The grease is quite stubborn, and progress is slow, but he is sticking with it. With any luck we will have them ready to lower the frame and boiler back down on the drivers by this time next year. Wednesday evening ended up with some delicious rib eye steaks grilled to perfection by Roger, a nice way to end the day.

Thursday a twenty-thousand pound capacity forklift, sourced out by Charlie, was delivered to unload our 16" lathe from where it has been residing over the summer, in the back of the dump truck. This machine was too heavy for our beleaguered white forklift, so more power was



in order. After the lathe was set in place, the next logical move was to relocate the locomotive drivers indoors where they could be cleaned and inspected for cracks, a chore the giant rented forklift handled readily, and we sent it back on its way. Our good friends from the Golden Gate Railroad Museum, Dave Roth and Severn Edmonds arrived to find us at work in the shop. Dave pitched in with Nathan and Steve on needle scaling and scraping the driver sets, and Severn set about cleaning the years of built-up scrounge on the lathe, which as he discovered, is in nice shape. Duane started the wiring, and he hopes to have it operational soon. Our thanks to the Union Pacific railroad for their donation of this machine. Steve Lee inspected each driver spoke closely, and found no cracking, which was a huge relief. Repairs to spokes can be a costly and dramatic undertaking.



Our "new" 16" lathe indoors at last! - Chris Allan photo

Roger began prepping the patched area on the right side of the wrapper sheet that had been removed last season. The sheet was corroded to the point of needing replacement, so new pieces of code steel were obtained. Roger and Dick ground the new plate to fit, beveled the edges for welding, and tacked in place so we could transfer the staybolt locations for pilot drilling. The two larger patches up on the roof area of the wrapper still need to be fitted; more work for the Spring. Thursday night was dinner at the Roadhouse across the river. Thursday was a good night for dining there- no Karaoke.

Friday cleaning continued on the locomotive frame outside. This less than pleasant task was undertaken by Ed Chase, Steve Cope, and Jim Greco, who was experiencing his first day in steam restoration (and hopefully not his last!). The guys found a formerly undisclosed crack in one of the frame spreaders. This can be ground

out and welded in situ due to its easily accessible location. Thanks to them for sticking with it, a good deal of the frame may now be inspected for cracking. Dick and Charlie primer painted the pilot beam and deck, as well as one of the cylinders. The 165 is starting to look like someone cares!

Friday continued with more of the same. Grease, paint removal, on and on it went. Roger's company thought they might need him at some point, so he headed back to Woodland that evening. Thanks to him for bringing up his welding machines, and getting a good deal of work accomplished. Steve Lee was presented with the Ultrasonic thickness readings taken to date. He will be begin to generate our FRA Form 4, which is essentially a big book of stress calculations, over the winter back in Cheyenne. Given the average winter temps in Cheyenne, he should be encouraged to stay out of the wind and get a lot done. Thanks again Steve for coming out to Portola and your continued support!

Dave and Dick took preliminary UT readings on the drypipe inside the boiler, the pipe that delivers the steam from the throttle valve on one end, to the cylinder admission pipes on the other. This is simply a length of seven inch diameter pipe with fittings on each end. Readings revealed thin areas in several places. I opted for replacement, Steve concurred. Now is the time to replace this component, since the boiler is devoid of tubes, and front tube sheet is partially removed, giving easy access. If we waited until after the engine was in operation, and this pipe failed, even if nothing bad happened due to the uncontrolled acceleration, we would have to go through seven levels of Hell to get it out. Another dandy project for the spring.

All week long Bob Sims was hard at work measuring our ex-D&RGW tool car for interior build outs to outfit it as a machine shop and work area for the Steam Department. Thank you to Bob for taking this necessary project on. As I write this about half of the materials necessary are onsite. Bob will with any luck and good weather get a lot done later this year.

Saturday we winterized, tarped, and generally put things away. Another season is behind us.

Sunday morning Dick and I headed down the hill and stopped into Colfax, where our Museum's train was on display, staffed by our friendly volunteers, for the Railroad Days celebration in that town. The equipment looked shiny and spiffy, a rolling ambassador to the WPRM.

Thanks again to all of you for your continued support. Thanks also to the team behind the scenes that makes sure we keep moving forward, including Rod and Gail McClure, Yardmaster Steve Habeck, treasurer James Mason who keeps us grounded, our webmaster Tom Carter, Eugene Vicknair, our graphics department and cheerleader for us from time to time, Norman Holmes who continues to donate more bits and pieces for the engine he comes across and of course to Steve Lee, whose mentorship during this project has been invaluable. Special thanks to Charlie Spikes who spends days getting ready for our arrival making sure everything is in place when we arrive.

Interestingly, after a gorgeous week in Portola, the weather turned just days after we left, and snow was flying again by the middle of the week. Everyone have a nice holiday season, and we will pick up where we left off next year! We will convene again at the end of April, after things thaw out a bit.



Dick Coudin drills holes for rivets at the base of the cab. - Chris Allan photo

WP 165 needs your help. Steam engines run on 4 things: fuel, water, rails and money. We've got 3 of those in abundance, but your help is needed for the last one. To donate to the 165, you can post mail a check to Steam Department - FRRS, P O Box 608, Portola, CA 96122. Or go on-line to the WP Store: giftshop.wplives.org. Click on Monetary Donations and select 165 Donation to support the return of steam to Portola.

## **BUY A HOUSE – HELP THE SOCIETY**

The FRRS has received the donation of a residence in Portola for resale, proceeds to go to support the Society's efforts. The property is located a few blocks from the museum just above Old Town Portola.

The home is a one bed, one bath layout with a kitchen, family room and front room, as well as a yard with alley access and a garage in the back. Condition is as-is. It does require work, mainly in the roof, but will make someone a nice vacation home or mountain residence.

The Society thanks Gary Yee for his generous donation to help our preservation efforts. If you would like more information on the property or would like to make an offer, please contact Eugene Vicknair (via email at eugene.vicknair@gmail.com) or Rod McClure (via email at president@wplives.org).





