

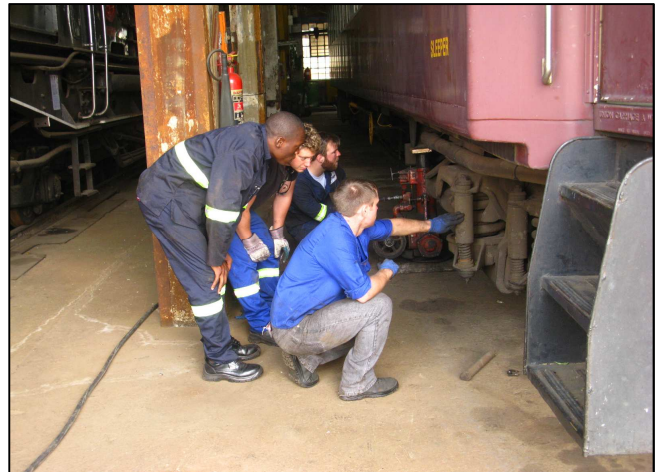


WORKDAY SUMMARY – 4 FEBRUARY 2017:

The main focus for the 4 February 2017 was the start of the 2017 Coach Lifting program. It isn't exciting work and it gets in the way of getting the locomotives done. But it is mandatory to keep the coaches in safe working order. Progress depends upon the number volunteers who come to assist on Saturdays.

We had a large group of Africa Academy Appies assisting with the coach, but they are too inexperienced for now to work on their own. But under supervision, they provided the hands (and muscles) to do the actual coach lifting and pivot inspections. Afterwards, our own knuckle-draggers did small repairs and stripping of obsolete and untidy undercarriage fixtures.

Kevin Simon was put onto the task of putting 15F 3046's smokebox back together for her next trip after she had undergone some very minor repairs.



P01 - Fresh meat to start our Coach Lifting program! A new crop of Africa Academy Appies assisting with the coach lift for the day - and for some it was their first visit. This is the Economy Class Sleeper Number 23445.



P02 - The main point of coach LIFTING is to disconnect the bogies, and to jack the coach up over the bogies for inspection of the pivot and its bearings. With the 40-ton coach being jacked up on both sides, you can see the shiny bolster pivot lifting away from the bearing boss right in the center of the picture. All the other jobs can usually be done with the coach resting on its wheels as normal.



P03 - Over the years, we have removed obsolete and untidy steam heating equipment, battery bays, wiring, old pumps, axle-driven pulleys, etc. It opens up the lower coach body for access, and for addition of a train-lengthed water mains and also saves weight. (Over 8 tons on a full length tour train.) Dawie Viljoen is seen cutting away a now-unused hangar bracket for a steam heating pipe.



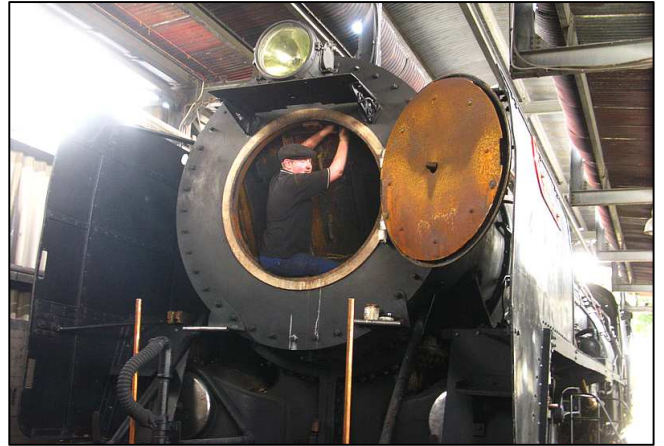
P04 - Coach lifting time is also used to give the brake linkages and suspension gear a good old-fashioned oil round. Here, Nicholas Goodale gets to work to lubricate the numerous pinned brake linkages and pivots.



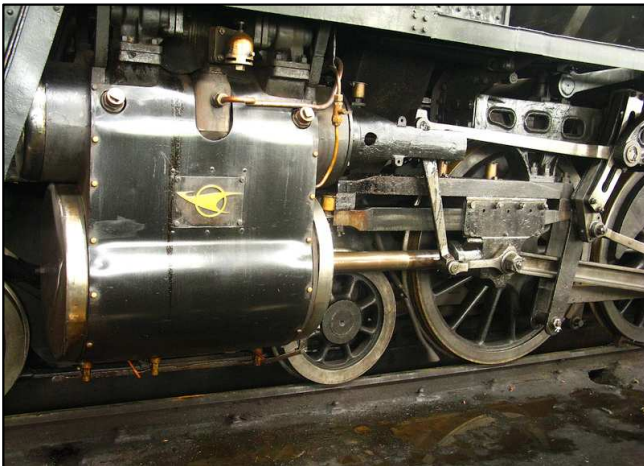
P05 - Aidan tackles the unbolting of the 21-inch brake vacuum pan for later removal. It was booked for a full strip down and inspection (And to be marked by a date when done), and new seals & roller ring as a matter of course.



P06 - 15F No.3046 is now the bread and butter loco while we start work on the 15CA. (We would commence engineering work on the CA's boiler the following week.) The 12AR is awaiting funds for her boiler tubes and lower front tube plate thickness-repair.



P07 - Our smokeboxes get opened and washed out after every trip. The char and clinker becomes corrosive if it gets damp and is just left in contact with the baked bare steel. While we have a staff member (Bongani) doing the strip and wash during the week, the Volunteer Members need to start putting the smokeboxes back together again.



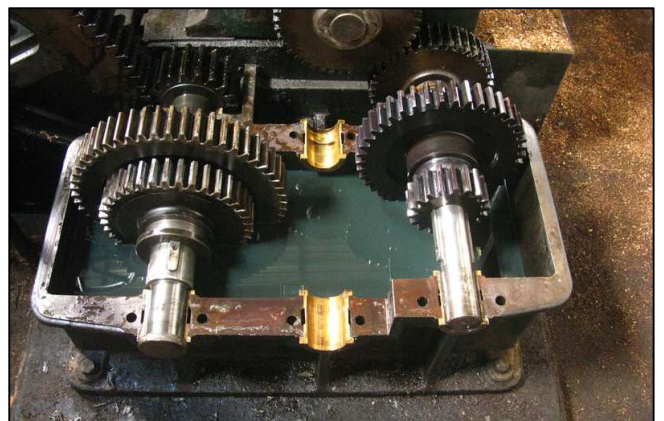
P08 - The old rail grinder is reported to still be running well after her recent piston and valve rebuild.



P09 - Peak summer time is a constant battle to keep the yards weed-free with bright sunshine and lots of rain on the warm, well-drained soil. This is less than a week's growth.



P10 - We got to enjoy some cupcakes for Oom Attie's birthday and it was amusing to see all the mechanical people battling to extract the cakes from their paper cups in one neat piece. We couldn't provide a cake for every year as it would have needed a DZ wagon to bring them in and enough candles to raise steam on the 15F!



P11 - The 1922 Craven Wheel Lathe's Secondary Gearbox had been opened up for repairs. The gearbox itself is running great. But the shell bearings on the center (idler) shaft are slightly too oversized for the shaft and a lot of oil leaks out during operation. They are going to be cut back and re-lined with Vesconite to better suit the shaft.



P12 - Ex-Millsite rescue Class 19D No.2540 had the boiler cladding and the underlying thermal lagging stripped off the previous weekend. (End of January)

At a quick glance, the exposed boiler shell looks fairly OK, but it still needs thickness testing, and MRI work at critical points as is now standard when assessing 'stored' locomotives. Long-exposed locos like this one sometimes develop deep localised pitting in the boiler shell, which necessitates expensive patching repairs.

Well-meaning people get all hot and bothered about rescuing locomotives but in this decade, you never really know if the recently rescued loco is a basket case or not, until work actually starts and money & effort has already been expended.



P13 - Ex-SANRASM Hyde-reboilered Belpaire Class 6A (No.454 b. 1895) looks a lot happier in Bay No.2. She has been purchased for private and personal restoration by Shaun Ackerman. She last ran in 2009. The boiler and smokebox had been repainted at SANRASM in 2011.



P14 - Here is the intact spare bogie for Class 6A No.464 previously pictured, and a repair section for the theft-vandalised frames just behind. Valve gear components await fitting from the Millsite Store and the loco's chimney and other parts are stored in the tender(s).



P15 - Saturated-boiler Class 6A No.473 (b. 1897) is parked neatly behind No.454 and is now owned by Clive Holliday who will also be doing a private restoration. 50 Class 6As were built between 1895 and 1897. Both of these little Cape Government Railway locomotives are 10-wheelers, being 4-6-0s. Both of these locomotives are to be private restorations and not formal Reefsteamers Projects, or by using Reefsteamers funds.



P16 - No.473's dome cover had already been lifted off to facilitate internal boiler inspection. The boiler is 100% full of brand new tubes which have never been used once. But all of them have been 'safe-ended' as someone had made a mistake and cut them too short, either from bad dimensions or because of front tube plate deflection. When PROPERLY done, tube safe-ending is acceptable, but a poorly-done job makes a failure point in a pressure vessel. It is very likely that the boiler will need to be completely retubed again for a long-lasting repair.



ABOUT EIGHT YEARS AGO THIS WEEK:



P17 - On 7 February 2009, the recently donated 7-Ton Dean Smith Grace Lathe was levelled out (Pictured), wired up and commissioned for its first RS job. This lathe was donated by Andrew King's old firm, Boswell Engineering, who helped us in numerous ways over the years.

The lathe has since been a useful machine only requiring work on the cutting oil pump and chuck. There was an incident where a carelessly placed spanner and some bolts were knocked into the open gearbox, but luckily the lathe wasn't running at the time. It took some dismantling to get the literal ... ahem! ... spanner out of the works.

The big lathe's first RS job was to machine the crosshead taper on the 12AR's left-side piston rod, the worn taper having been built up by welding during the week.

DID YOU KNOW?



P18 - The planar bearings of a steam locomotive usually have oil distribution grooves cut into the white-metal bearing surfaces. These are usually made AFTER the bearing surface had been machined to suit the application. The grooves are then smoothed with a shaping spoon if necessary, especially if the job was done manually.

This is the under-plate for the valve crosshead for the 12AR and you can clearly see the two points where the lubricant is applied. In this case, the lubricant is grease and thus extra effort had been made to extend the grooves to the corners. By contrast, the main crosshead is lubricated via a pair of traditional oil-wick cellars.

The repair for the day was the making of new shims for the crosshead. You can one of them at the lower left.



FORTHCOMING TRIPS

February 2017							March 2017						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4				1	2	3	4
5	6	7	8	9	10	11	5	6	7	8	9	10	11
12	13	14	15	16	17	18	12	13	14	15	16	17	18
19	20	21	22	23	24	25	19	20	21	22	23	24	25
26	27	28					26	27	28	29	30	31	

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Claire 082 894 8877

DEPOT CONTACTS

Documenter (Author)
Documenter@Reefsteamers.com

Workshop Email :
Engineering@reefsteamers.com

Main Website :
www.reefsteamers.com

Workshop Facebook :
<https://www.facebook.com/groups/reefsteamers/>

Train Trips :
bookings@reefsteamers.com

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