

Swanage Railway Trust 563 Locomotive Group Station House Swanage Dorset BH19 1HB

563LG, T3 Times - October 2022

Autumn Thoughts

With inflation skyrocketing and the cost of living crisis hitting hard, it's no secret that times are tough for many. Amidst the looming clouds, we hope that 563's return to traffic provides a suitable ray of sunshine to look forward to next year. As you will see from this bumper issue of the T3 Times, striking progress is still happening on 563, made possible by your donations.

With the lion's share of the reassembly completed on the chassis of 563, the team at the Flour Mill are now focusing on finishing the boiler. At Herston Works, volunteers and contractors are forging ahead with the tender. With a fair wind, we might hope that they will be united sometime in the first half of 2023, although of course this will be determined by the speed at which we can close the funding gap, now at just above £100,000.00. With everyone counting the pennies at the moment, anything you give will be most appreciated.

Flour Mill Update

Work continues at a good pace in the Forest of Dean. The coupling and connecting rods have been refitted onto 563, meaning all the valve gear is now in place. They have also been working on many other details, such as the cab roof, steam heating pipe routing, lubrication system, fitting the front and rear cylinder covers, and injectors. Shortly, we will be arranging for the signwriter to begin lining the locomotive out, which will further transform its appearance.

Work on the boiler continues and the process of drilling stay holes and fitting stays is ongoing, this is likely to remain a critical task for the flour mill over the next few months, with 100s of stays to fit this isn't unfortunately the most photogenic work, however, we're sure you'll appreciate the time and effort that goes into this precision work.

Various photos showing progress on fitting stays to 563's boiler and other activities:



Holes for the stays being drilled, viewed from the outer firebox.



The view of the stay holes from the inner firebox.



Copper stays start being added to secure the inner firebox within the outer firebox.



Copper stays also being added through the bushes on the throat plate.



Work has started on components for the lubrication and pipework.



Connecting and con rods have been refitted.



Slowly but surely the boiler is making superb progress.



The angle ring at the front of the boiler has temporarily been bolted to hold it place, before riveting.



The lubrication pipework and trays have been fitted in the cab.



The injectors have also been mounted.



The cylinder packing that seals around the piston rod has been fitted.



The burnished covers adorn the front and rear of the cylinder.



The cab spectacle plate has been trial fitted.



563 was rolled out into daylight for the first time in a while - doesn't she look wonderful!

Tender Progress

563LG volunteers, Swanage Railway Staff, and Southern Locomotive Ltd volunteers have all enabled good progress to be made over the last few months. On the tender frames and wheels, the principle task has been to needle gun and wire brush the paint and rust off, ahead of applying primer. There is a regular group and growing group of volunteers working every Wednesday, if you would like to help out please drop us a line at: 563locomotivegroup@swanagerailway.co.uk

Here's another compilation of photos showing progress on the tender chassis at Herston works:



The tender frames after priming.



Needle gunning and wire brushing by our volunteers.



The tender wheelsets now need needle gunning before the axles go for polishing.



Cleaning up the tender frames revealed 563 stamped on it!

Herston Works

Inside Herston Works, work has been focused on refurbishing parts for both the tender and the loco of 563. This has included the spring hangers and brake rigging for the tender. Another welcome surprise was the condition of the steam brake, which when dismantled looked virtually brand new inside, and must have been refurbished or replaced in 1948/60. Perhaps the 3 years of storage outside in Eastleigh works wasn't kind to the steam brake and it needed to be replaced, or perhaps it was a 'new' spare left on the shelves at Eastleigh works; either way, we're very grateful for the quality of the restoration done in 1948.

There's a large pile of non-ferrous bits for the locomotive, axle boxes, buffers, keeper pads and various smaller items which need to be cleaned, dismantled, checked and refurbished in the next few months. Any assistance with this would be greatly appreciated, to get involved please email: 563locomotivegroup@swanagerailway.co.uk







Request for volunteers

As this issue shows, work is progressing on a number of different fronts and there are a few different volunteer opportunities we'd like your assistance with:

- 1) Volunteering on the tender and refurbishing components at Herston Works
- 2) Assisting us with running a 563 Locomotive Group stall during Flying Scotsman's visit to Swanage Railway in 22nd-26th October 2022.

If you would like to help us with either please contact 563locomotivegroup@swanagerailway.co.uk

From the archives: Eastleigh records - part 2

In this edition of the 'T3 Times' we look at 563's recorded overhauls. We are fortunate in having access to the official Eastleigh Works records and the records of observer George Woodward which were transcribed by his friend Tony Sedgwick. From these sources, we have been able to put together at least part of her maintenance history from 1927 onwards.

Every locomotive visit to the works was categorised from A to D using the following system.

A (General Repair / General Overhaul) - approximately every 75,000 or two years (the interval was extended during WWII) with engine lifted off wheels, boiler exchanged.

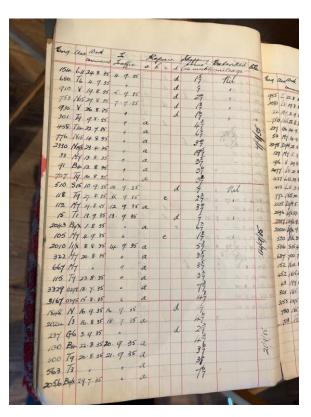
B (Heavy or Light intermediate) - approximately halfway between A repairs, often did not happen unless a boiler repair was needed.

C (Casual) - to rectify any defects occurring.

D (non classified) - any specific repair work / accident damage / re painting (updated / new liveries) or weighing.

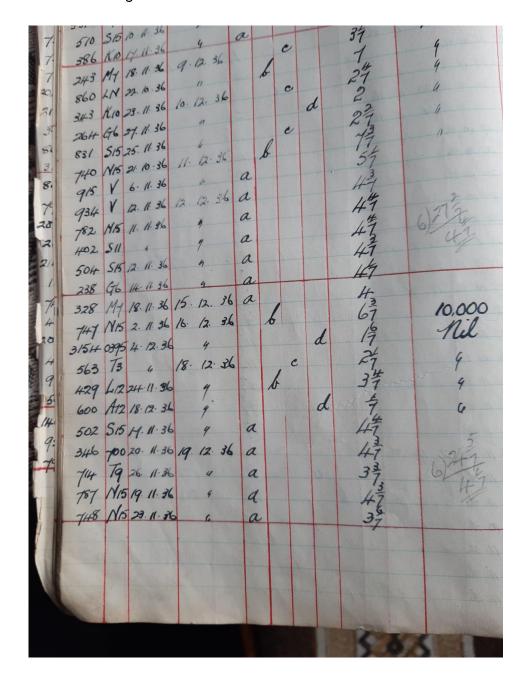
Although George Woodward noted 563 in the works at Eastleigh in March 1924, the earliest formal records we have are axle cards dating from 1927 and locomotive ledgers from the 1930's. From these various sources, we note that 563 is recorded as in the works for a general overhauls (A) in May - September 1927, May – June 1930, December 1932 - February 1933 and August - September 1935. During the 1927 visit, the bogie axles removed were both overhauled. However, both were declared 'worn out' in December 1932 but were not replaced until early February 1933. Interestingly, one of the replacement axles had previously been under 570 (withdrawn 1931) which suggests that either that locomotive was still sitting on the scrap line in 1933 or had been 'harvested' for parts when scrapped. Driving wheel axles were less interchangeable and it is clear that the 1927 overhaul between May and September also included the overhaul and replacement of the same axles. When eventually in December 1932 these too were declared worn out, their replacements (perhaps with wheels) were recovered from 558 (withdrawn 1931) in January and fitted to 563 the following month. It appears these too were life expired and scrapped in January 1937 but there is no record of the source of the replacements fitted in December 1936.



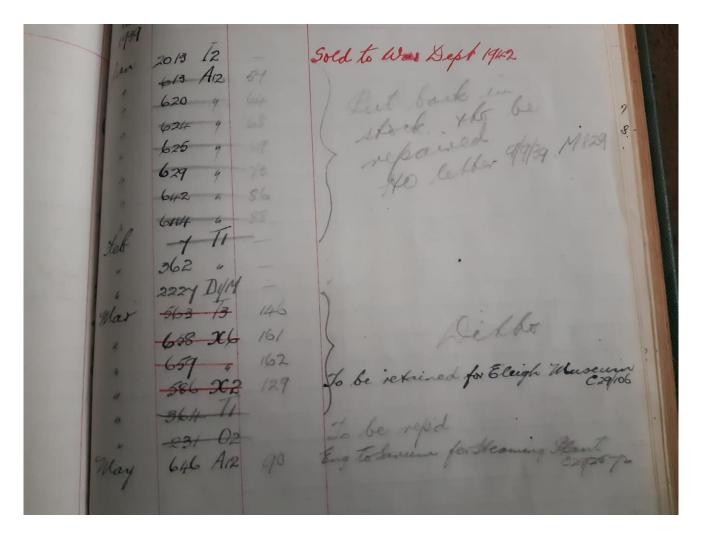


As by 1935 only three T3's were left in traffic, it is perhaps unlikely that a spare boiler would have been available should major repairs have been found to be necessary. If any withdrawn T3's were still on the scrap line and able to donate parts as we have seen with the axles, it is unlikely that they would have good boilers otherwise it is likely that they would still be in service. Had 563 been found to require major boiler work at that time, it is likely that that would have resulted in the locomotive being withdrawn on the spot. So again it is more likely that the overhaul was limited to the bottom end – wheel sets, cylinders and motion - with boiler work limited to replacement of tubes and stays. By present day standards, to complete whatever was deemed necessary in three weeks and six days is rather impressive although of course all materials and specialist labour would have been available to ensure a quick turnaround.

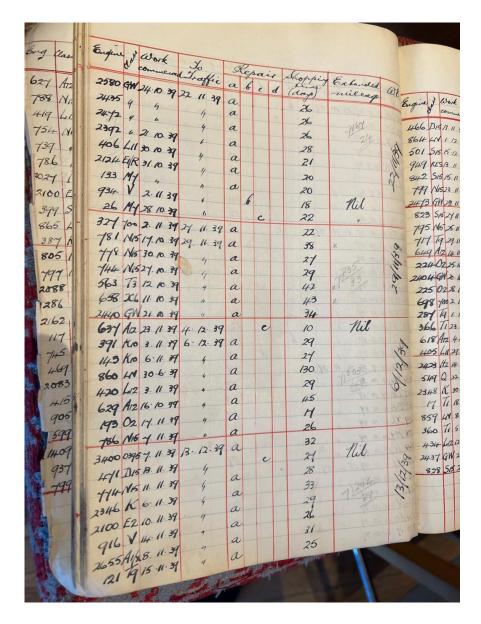
563 was back at Eastleigh in December 1936 for a casual repair (category C), perhaps required by the driving wheel axles being at scrap limits as we have already seen. Between December 1936 and its failure in service in April 1939, 563 saw only light use and periods in store. Although nominally repaired and returned to traffic later that month, she was put back into store at Eastleigh shed and saw no further service until called back to the works for another general overhaul in October 1939.



That reprieve – 563's first - shortly after the outbreak of the second war on 3rd September 1939, followed the receipt at Eastleigh of a head office letter dated 9th September 1939 with instructions that some 16 locomotives were to be repaired either for service, sale to the War Department or to act as stationary boilers.



This general overhaul, this one lasting 42 days until release to traffic on 29th November 1939. We can speculate that the extra time was required for the extensive firebox repairs that were apparent when preserved in 1948. Certainly, most general overhauls were being completed in less than a month, though it is interesting to note that 'Lord Nelson' 860 'Lord Hawke' was in the works for 130 days in 1939. Although the reason for this lengthy stay are not given, this locomotives was subsequently damaged in August 1940 as a result of enemy action at St Denys.



The last visit to the works, prior to preservation was between June and July 1942.

To summarise. Piecing this all together, it would suggest that 563 received attention at Eastleigh as follows:

May to September 1927
May – June 1930
December 1932 – February 1933
August – September 1935
December 1936
September – October 1939
June – July 1942

The 1942 visit – recorded by Tony Sedgwick as 'short' so perhaps a category C - was the last prior to withdrawal from stock in August 1945. Of course, it is likely that the necessities of war required that local shed repairs took the place of overhauls and much else was just deferred.

My thanks to Graham Muspratt for information on the SR overhaul classification system and to Jim Boudreau for access to the records of the late George Woodward and Tony Sedgwick.

Steve Doughty