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563LG, T3 Times – November 2021

Dear 563 Supporter,

The team at the Flour Mill have been hard at work, as always, since our last T3 Times. Work has been focusing on the loco chassis and valve gear ahead of eventual re-wheeling. The cannon boxes that the valve rods go through have been machined, boring them out and putting in bronze liners, ready for reassembly of the valve gear. The brake gear has been re-bushed to remove the slack in the assembly. Ahead of re-wheeling, the team have spent about a week on filling, painting and rubbing down the frames. Likewise, they are painting the wheels as this is much easier to do while they are out of the frames - they are hard enough to paint anyway with the enormous surface area of all the spokes, especially with all the irregular cast surfaces. The Flour Mill has machined the new steel horn ties which are fitted in place, although of course, they will have to be removed to put the wheels in.

We expect work to recommence on the boiler shortly, following late summer holidays by key Flour Mill staff working on this part of the locomotive.

The team at the Flour Mill have also begun looking at the reversing screw, there appears to be some slack in the screw. Further investigation is required, it could simply be that the slack is caused by the screw not having any weight from the valve gear keeping it tight, or it might need replacement. Either way, our friends at Southern Locomotives had a new screw re-made for Eddystone's recent restoration, and so this shouldn't be hugely expensive should it need replacement.



The machined cannon boxes with new bronze liners that guide the valve rods.



Smokebox

Following a call for sponsors a few months ago, we are delighted to announce that a supporter has come forward and donated the cost of replacing this. The smokebox will be re-made to the original specifications, including the use of flush rivets. We offer our grateful thanks for this most generous donation.

Every component sponsored brings us closer to finishing 563. Would you like to sponsor an item? We've got components ranging in value from £50 to £20,000. If you'd like to find out more, please contact us directly at 563locomotivegroup@swanagerailway.co.uk

From the Archives: 1960 restoration, what do we know?

Following on from last month, I thought it would be useful to outline what we know about the 1960 restoration of 563. A visit to the archives of the NRM earlier this year yielded more details of 563's past. We are grateful to our friends at the NRM for their help with access to their archives and for their permission to reproduce extracts here.

563 returned to Eastleigh with Boxhill, leaving Tweedmouth on 28th July 1959. By 1960, the collection at the British Transport Museum at Clapham was being assembled and it was announced that 563 would be refurbished for display. 563 appeared, in a rather forlorn state, at the August 1960 Eastleigh Works open day. By September 18th 563 was in the works where repairs and modifications were being undertaken.

One might assume that as the locomotive was museum bound, 563 was to only have remedial repairs and a repaint undertaken, this is quite far from the case. We are lucky to have access to the estimates provided by various departments of Eastleigh Works ahead of the overhaul being undertaken, these were put together on 14th March 1960. The schedule of work consisted of:

563 items to alter or provide:

Cab and Splashers

- *New wooden roof to be made, brass edging to be provided for splashers;*
- *Safety chains and hooks to be removed from cab doorways*
- *2 bosses on the L.H.S of inside of cab to be removed*
- *Blower handle to be changed; All holes made by any alteration to be filled.*

Pipework etc.

- *Pipework to be made to conform as near as possible to drawings 6688&6975 [original drawings] especially the following:*
 - *Pipe to vacuum gauge to couple up without circling the gauge first;*
 - *Pressure gage pipe to come from small cock on the back of the combine;*
- *Pipes from steam brake valve to be carried round L.H. end of fire door slide*
- *Exhaust pipe to be led into ashpan L.H.S.*

- As Roscoe lubricators are to be fitted to the sides of the smokebox the cylinder lubricator and associated pipes and clips in the cab to be removed
- Pipes to be run from Roscoe lubricators to cylinders and trains
- Pipes to be run from 1 feed oil boxes in front of smokebox to oil tail rods
- 3 feed oilboxes for driving axle to be moved to front of splasher and pipes altered to suit
- Sand pipes to be altered to conform to [original drawings]
- Oil pipes on crossheads to be altered; Oil boxes to be fitted with taps

Smokebox & Boiler

- Bracket to be fitted over smokebox door handle; smokebox rivets to be flush
- Roscoe lubricators to be fitted to each side of smokebox directly below handrail pillar
- Alternative estimate (a) made in wood.
(b) made in brass to outline only
- Dome cover to be replaced by one from scrap engine.

Frame etc.

- Leading footsteps to be altered to suit
- Cylinder flange covers above frame
- Certain rivets in frame to be flush
- Leading bogie wheel splashers to be made (Similar to splashers over trailing bogie wheels)
- Front cylinder covers or new ones to be made (Pattern not available.)
- Tail rods (screwed in existing rod if possible)
- Spring equalising gear and bracket
- Guard iron bolts to be flush outside frames
- End of guard irons to be made up to shape and to be 3" from rail.
- Side lamp brackets on buffer beam to be removed
- Lamp irons to be removed from lamp brackets

Drawgear etc.

- Front buffers to have hole in ends
- Buffers to be held on by 4 bolts with heads outside and to be held together with rivets (see tender buffers as well)
- Pin on drawhook to be reversed
- Clip on vacuum hose to be turned so that bolt is underneath

Tender

- Tender coal rails to be removed
- Tool box to be fitted at back
- Clothes box to be made
- New Lid to be made for filling hole
- Steps to be fitted to back end of tender frame
- Guard iron bolts to be countersunk outside frame
- Buffers to be held together with rivets then bolted on to buffer beam with bolt heads outside

Burnishing

- Handrails, buffer shants and faces
- Lamp holders, Coupling hooks and safety chains
- Cylinder cocks and operating rods
- Smokebox door hinges and handles
- Lubricators and oil boxes
- Sanding gear rods
- Clacks and feed pipes

- *Injectors and associated pipes*
- *Whistles and operating gear, combine and pipes*
- *Cab window frames*
- *All cab fittings, handles, rods and pipes,*
- *Safely valve lever*
- *Cab edging (beading)*
- *Connecting and coupling rods and crossheads*
- *Valve gear, revering shaf and arm, reach rod*
- *Screw reverser*
- *Brass splasher edging*
- *Back cylinder cover and gland*
- *Brass beading behind smokebox*

Painting

Painting to confirm to painting diagram and photographs

Other items

- *Tyres to be turned*
- *Interior of smokebox and firebox to be preserved under the instructions of Mr. Dunkley*
- *If necessary change the tender axleboxes with those on one of the plate trucks in the yard i.e. axleboxes with side oiling*

Drawings marked x are original drawings or prints and must be kept clean and returned to the Drawing Office after use.

563 finally left Eastleigh on 25th January 1961 by road, due to a landslip at Hook, being transferred to the Clapham Transport Museum where its Adams' LSWR livery was applied.

The above list is a real testament to the quality and detail of the work carried out on 563 at Eastleigh, they certainly did not cut corners in returning 563 to as close to 'as built' condition as possible. It is eminently possible that some of those employees who restored 563 to her original condition at Eastleigh may still be with us. We'd love to hear first-hand about the 1960 restoration so if you were there or know anyone who was, please get in touch!



Rail Online photo

Tender

The Tender is due to be moved in the next few weeks to enable a start to be made on dismantling ahead of this being taken into Herston Works for restoration in 2022.

563 Supporters will know that earlier this year we launched the T3nder Club to focus attention on the need for 563's tender to be restored in parallel with 563 herself such that both will be ready for service in 2023. Donations to the T3nder Club have now covered the cost of the parts and materials needed, thanks to the generosity of our supporters, but to raise the balance of £25,000 needed to fund labour and contractor costs we have agreed with our parent the Swanage Railway Trust that the tender should be the subject of the Trust's own 2021 Winter appeal to its some 4000 members. This welcome support from the Trust, made possible by the successful completion of the pandemic 'SoS Appeal' and the subsequent appeal for the carriage shed, recognises the importance the Trust gives to having its own motive power on the Swanage Railway alongside that which is otherwise hired or leased. The tender restoration will probably be underway by the time you read this, starting with disassembly and cleaning on the pad at Norden followed by removal in kit form to Herston Works. Restoration of 563 herself at the Flour Mill continues to be funded by you, our loyal supporters now over 400 in number, to whom we offer our grateful thanks.

Stays

One of our supporters, Martin Sheret, has done a sterling effort in turning and stamping the original stays removed from 563's firebox. Each Stay is individually numbered and is your chance to get your hands on a unique piece of our T3! These are offered to supporters donating over £100 after the first 12 months, or an equivalent lump sum. We have now sent these out to all of the relevant supporters, although we still have a limited number of these available on a first-come-first-served basis. Once they're gone they're gone!

