

Update on activity at the Lakeside and Haverthwaite Railway - November 2023

General Status

This month's newsletter is dominated by the news of the successful 'in-the-frames' steam test of Ivatt mogul 2MT 46441 on 25th October. What a terrific birthday present it was for the owner, Betty Beet, as she had the pleasure of a short ride on the loco on the Haverthwaite yard headshunt! There is still some mileage running to do to finally commission the locomotive into service but we can easily do this now that the main season is over. We should shortly see the loco back at Lakeside for the first time in over 58 years. Photo (below) shows the loco being warmed through for the first time.



It has taken us 5 years (including the Covid period) and a huge amount of effort to get the loco running again. A big thank you goes to the Beet family for agreeing that the locomotive should come to the L&HR. This overhaul would not have happened without the L&HRly Co. generously prioritising its limited funds at a critical time due to Covid. For that we are very grateful.

Thanks also to the following:

- West Coast Railway Company for the high quality job they have done on the boiler overhaul led, in the boiler shop, by John Haddow.
- Chris Beet and his team for their work on the overhaul including Geoff Martell for his machining of several complex parts.
- All the John Fowler & Co. team for their dedicated work on the tender repairs, manufacturing of many loco parts plus the vast majority of the loco disassembly, reassembly and commissioning.
- The L&HR volunteers who have fitted around the above teams supporting their tasks and doing a significant amount of stripping back old paintwork and giving the cab and lower half of the loco, boiler and tender some fresh protection from the elements with several coats of new paint.

As we close the main season of our 51st year we can reflect on another year of steady recovery from the setbacks caused by the Covid pandemic, coal availability and price as well as the more recent cost of living crisis. Despite the headwinds, we feel well placed and optimistic that we can continue this gradual recovery in 2024.

Locomotive Status

Bagnall 'Princess'	- Operational
Bagnall 'Victor'	- Operational
Barclay 1245 'Carron Iron Works No. 14'	- Operational
Barclay 'David'	- Operational
BR Class 20 20214	- Operational
BR Class 110 DMU	- Operational
BR Class 03 D2117	- Operational
BR Class 03 D2072	- Operational
LMS Class 11 7120	- Operational
Simplex Tram 'Rachel'	- Operational
BR Fairburn 4MT 42073	- Awaiting overhaul

Locomotives under overhaul:

Ivatt 2MT 46441

During the last month the John Fowler & Co. engineering team have installed the concrete arch in the firebox. They have fitted the chimney, ejector exhaust, petticoat and pipework to complete the fittings within the smokebox. They have also temporarily installed the newly manufactured self-cleaning screens. These were then removed to facilitate the final steam test. Photo below left shows the smokebox status on 5th October.



Chris Beet, Mike Hurst, Graham Magee and John McKay fitted the piston valves and checked the valve settings. The valve heads were measured and inserted into position (photo above right). By moving the loco with the diesel, the valve heads were confirmed as being to correct dimensions. The valves were then removed and rings fitted and contracted for re-insertion. This was straightforward to achieve given the experience of the team. The cotters were then fitted and the motion set-up finalised.

The valve front covers have been fitted, followed by the outer covers. The loco was moved a couple of full revolutions of the driving wheels to confirm the valve gear was moving as it should.

The footplate fittings have been finished off and the steam heat plus steam brake hoses fitted between locomotive and tender. The tender water tank was filled and checked over to ensure that all was watertight. The boiler was washed out and filled again. The loco was then ready for its first trial steaming.

On the 18th October Betty Beet performed the ceremony of lighting the first fire. The photos below show Betty, with the match, lighting the oil soaked rags (assisted by Jack Dibnah) and then placing the rags into the firebox.



...and here we see the first warming fire. The loco was warmed through and by the end of the day sufficient steam pressure had been raised to test the injectors and check around for any other fittings that required nipping up. Time was taken to get some group photographs celebrating the loco in steam for the first time in 21 years.

Photo (right) shows Betty and Chris Beet in the centre, with some of the volunteers and directors.



Photo below shows the John Fowler & Co. team.



The loco was then checked over doing a couple of short moves up and down the yard. The photo (below) shows 46441 making its first move in the fading light of the day. With one or two minor tasks to address during the following few days the Ivatt was ready for her 'boiler in the frame' formal steam test scheduled for the following week.



The steam test took place successfully one week later. Photo below shows Princess being prepared for the service trains and 46441 raising steam for its big day.



A reluctance of one injector to 'pick up' with its new cone led to some diagnostic tests including swapping the steam cone with the same part in the other injector. This, in turn, led to both injectors functioning properly. With the issue resolved and the safety valves finally set under the watchful eye of the boiler inspector Rob Houghton, passing the test was straightforward.

Photo (below left) shows Rob Houghton inspecting the smokebox. Photo (below right) shows Jack Dibnah adjusting the safety valves to instructions from Rob Houghton who was watching the gauge on the footplate.



The photo below shows Betty having her first ride on the loco in steam (for a long time). Perfectly timed for her birthday!



This overhaul was much more than just a case of disassembly and reassembly of a significant proportion of the locomotive. It is easy to forget how much we have had to do. There was a good deal of manufacturing new bespoke components and skilled repairs of existing components. Below is a brief re-cap of what was achieved by the teams:

Boiler.

Lower outer firebox wrapper and lower firebox throat plate replaced. Firebox backplate corners repaired with welded inserts and doublers. New large and small tubes, new superheater elements, repaired superheater header. Boiler painted and boss faces machined. New smokebox. New self-cleaning spark arrestor. All fittings refurbished. New safety valve springs. Ashpan modified.

Chassis.

New blast pipe and refurbished blast pipe cap (blower ring). New cylinder rear cover. Rebored cylinders and valves, New pistons and rings plus new valve heads and rings. Reground piston rods. Crossheads machined to size. New intermediate drawbar and pins. New drawbar safety link pins. New main steam pipe gland plates.

Lubrication systems inspected and cleaned. Axlebox pad exam. Injectors checked and overhauled with new steam cone. Cylinder drain cocks overhauled. Pipework repaired and some replaced. New hoses for steam heating, steam brake supply and vacuum.

Rear frame stretcher repaired. Frames and wheels cleaned and painted both outside and inside.

Tender.

New spring hanger pins. Tank removed to replace plate work on the drag box. New plate work on the coal space/water tank including tank vents. New tender cab fabrication. Tender chassis painted inside and out.

BR Fairburn 4MT 42085

John Fowler & Co. have completed the fabrication of the new rear frame stretcher (pictured right, alongside the old one).

Otherwise, with most of our attention being on 46441 during October, there has only been a small amount of surface preparation work done between the frames.

Similar surface prep work has continued on the ashpan actuating mechanism and water transfer boxes.



Hunslet Austerity 'Repulse'



Hydraulic testing on Repulse's boiler identified the need to replace an old repair on the firebox throat plate corner. The repair had been in place for several decades from its days in NCB ownership. Photo (left) shows the boiler being prepared for its return to Old Hall Farm for John Fowler & Co. to complete this task.

Volunteering opportunities at the L&HR for 2023 and into 2024.

New and returning volunteers are always welcome. Locomotive, carriage or wagon overhauls and S&T repair/replacement continue to give us plenty opportunity for a variety of restoration tasks.

We welcome you to join our midweek gangs (or indeed any day of the week) to work on maintaining and improving our railway, including the rolling stock overhauls. We can certainly make a big difference to the visual standard and the pace of work that is done. Just get in touch and we can provide more detail. It is a friendly place and we all find it really rewarding! We shall endeavour to ensure that you are directed towards (and supported on) the appropriate tasks.

If your preference is to volunteer on some of the wider range of tasks that you will see taking place at our railway (or via this newsletter), including gardening, permanent way maintenance or locomotive crew/train operations, then again, please get in touch either by e-mail to info@lakesiderailway.co.uk or phone 015395 31594 Option 1

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<https://www.lakesiderailway.co.uk/newsletters/>