



B1 NEWS *flash*

Newsflash of the Thompson B1 Locomotive Trust

www.thompsonb1.org

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Wheelset repairs continue.....



Showing just how much has had to be ground out to repair some of the cracks, this view is one of the rear wheels. Photo courtesy of Dave Fowler.

Wheelset update

Alf Bousie

As the last copy of B1 News was going to press, the major problems with the rear wheelset were just emerging and it had been sent to Riley and Sons in Bury for tests and further investigation with a view to getting quotations for the grinding out and welding up of the cracks. Since then the remaining wheelsets have also been delivered to Bury to assess their condition and see if any remedial work is necessary to them.

By mid July all the wheelsets had been prepared ready for RSA Labs to carry out a magnetic particle examination to assess whether the welding of the cracks could commence. The good news was that RSA inspected the front two newly-prepared wheelsets and only a couple of cracks were identified. After some discussion it was decided to leave these alone at least until the trailing wheelset is finished.

The cracks on the trailing wheels had been excavated to 70-80mm in one place on the hub. Although this appears deep, RSA were confident that the cracks had now been sufficiently ground out. A revised welding procedure was agreed so that welding could commence. As previously mentioned this process has to be done very carefully to avoid any distortion or cracking to the wheel and as it was taking longer than expected a start was made on the repairs to the leading and middle wheelsets. At the beginning of August the middle wheelset had been completed, however it does need a working party to clean it up and repaint the wheels. The leading wheelset was partially finished with half the cracks around the spokes completed. The work looks neat and hopefully the remaining cracks will be dealt with shortly.

Progress on the rear wheelset has been slower with only a little welding having been carried out on the wheels. In addition to all this work, the rear wheelset will require new crank pins and all the wheels will need turning. Consideration had been given to casting new wheels but in view of the likely cost involved and the possible time delays it was felt this wasn't an option.

The consequence of all this is that the loco will be out of service for at least the current operating season. As well as being a great disappointment to our members, who have not been able to see or travel behind the loco, a whole season of running fees has been lost. By the beginning of August the remedial works had already cost £18,000 with possibly a similar amount required to complete the works. This is in addition to the £15,000 we had already spent on re-lining the RHS cylinder and on general winter maintenance.

As our cash reserves were beginning to run out, consideration was then given for an appeal to members for funds to complete the works. However, thanks to the generosity of one longstanding director, an interest free loan of £25,000 has been agreed, to be repaid from future hire fees. I am sure everyone will want to thank this individual for his extremely generous offer. It does however mean that our directors are now owed some £70,000 in outstanding loans.

It would appear that we are not alone in discovering cracks in our loco's wheelsets. Currently, work is taking place to repair cracks in Oliver Cromwell's wheels and a number of other locos have had similar remedial work carried out. Hopefully our works will be completed soon so that a return to steam can be achieved swiftly.



The lead and middle wheelsets sandblasted and ready for inspection.



A radial crack on the right trailing wheel, 15mm deep and going all the way round the hub.



Here work is in progress on the leading wheelset with welding partially complete



Half the cracks around the spoke and hub have been completed and this shows the neat finish that has been achieved. All photos courtesy of Dave Fowler.