

## GCR 567 Loco Group

# GCR Class 2 No.567 Project

Dennis Wilcock, Treasurer of the GCR 567 Locomotive Group, reports on the 2018 Supporters Day and gives an update on progress



The project to build a brand-new MS&LR/GCR Class 2 4-4-0 took a major step forward when the 567 Locomotive Supporters Day, 2018 opened on the 15th September with the freshly assembled frames in plain sight on the apron to the GCR(N) Ruddington Locomotive Works. Chairman Andrew Horrocks-Taylor explained that we now had the skeleton of the locomotive laid out for all to see.

Chief Engineer Mike Fairburn then took the supporters around the frames explaining what would be fitted where and the challenges of some of the clearances. He also explained that the frames had been trial assembled, with the setting of the frames being the next step. This would entail things

such as alignment of the motion stretcher to the crank axle centre and then alignment of the cylinder block to the motion stretcher, both being an absolute requirement ahead of hot riveting.

Supporters also viewed the bogic frame side-plates recently laser profiled and delivered to Ruddington. These components mark the start of the next phase of locomotive construction.

After a successful AGM, many supporters then rode behind the NRM prototype 125 unit along the original GCR line on the GCR(N) and so ended a great day with lots of good feedback for the restructured management committee

The newly assembled frames of GCR No.567 at Ruddington during the 567 Supporters Day, 15th September 2018. ANDREW HORROCKS-TAYLOR

## Component Parts Review

### Hornguides and Main Frames

At the AGM it was a pleasure to confirm that an order had been placed for the main frames hornguides. The hornguides have been generously sponsored by supporters to whom we extend our sincere thanks. Delivery of the hornguides will enable a major step forward in fitting out of the main frames themselves. Further components will be added to the frames and



Drilling of the frames prior to assembly, 24th August 2018. SIMON BURTON

once the bolted assembly proves that everything fits properly together, riveting of the frames can begin. This process is expected to take us well into 2019.

### Valve Spindle Guide

The casting of the Valve Spindle Guide for which Ken Harrison made such lovely wooden patterns has now been delivered and awaits machining.

#### Crank Axle

Supporters will know that Finite Element Analysis (FEA) was performed on the crank axle design to

ensure that there were no excessive stresses in the design which might cause the axle to fail when in service. This preliminary analysis showed promising results so FEA Solutions, who provided the previous analysis, have been asked to quote for a fully engineered analysis that will provide properly authenticated approval of the design so that manufacture can proceed.



567 Loco Group Chairman Andrew Horrocks-Taylor describes the frames of No.567 to supporters attending the Open Day at Ruddington, 15th September 2018. SIMON BURTON

#### Boiler

Mike Fairburn has worked hard to produce a draft specification for the boiler of No.567. Supporters

> may remember that at the start of the project it was thought that an existing donor boiler might be suitable. However, examination of that boiler showed that for the cost of repairs that were needed a brand new boiler could be obtained. With a new boiler having a much longer life and with much less maintenance required it was a no-brainer to go forward with a new one. Consequently, expressions of interest are being sought from suitable contractors towards development of a suitable and accurately costed design. This is a long term project!

> One of the many advantages of building a MS&LR/GCR Class 2 4-4-0 locomotive is that it is a very simple locomotive

Mike Fairburn drills holes in a doubler plate for assembly onto the frames of No.567. These plates will strengthen the front of the frames, an area of weakness in the original locomotives. SIMON BURTON



compared with many other new build projects. This is nowhere more apparent than in the boiler. In contrast to the other projects it is a saturated boiler without the complicated and expensive superheating equipment. It is also round-topped making construction much simpler than boilers with Belpaire fireboxes. This makes 567 a much more achievable and much less costly project than some.

## **Fund Raising**

Did you know that while you are shopping on the Internet at your normal suppliers you could be making a financial contribution to

No.567 without any cost to yourselves?

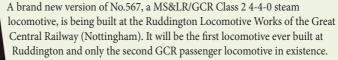
Go to: www.easyfundraising.org.uk/causes/gcr567loco



The newly arrived bogie side frames on display at Ruddington, 15th September 2018. *ANDREW HORROCKS-TAYLOR* 

# THE GCR 567 LOCOMOTIVE GROUP

A Return to Victorian and Edwardian Elegance!







Already the frames have been assembled with many components sourced and ordered.

To continue this exciting venture you can join The GCR 567 Locomotive Group by becoming a Supporter for as little as £5.67 per month

Further details at www.gcr567loco.co.uk Dawn Bullock, GCR 567 Locomotive Group Administration, 19 Hartridge Walk, Allesley Park, Coventry, CV5 9LF