

Progress 2017

Introduction

For 2017 the main priority is to put right the problems cited in the 2016 Annual Report, i.e. dropping each wheelset in turn, to fit axle box links. Whilst the wheels are out countersink the spreader rivets, change the links and then assemble the brakes. This it is hoped can be achieved in the first quarter. Furthermore, the tender plate should be finished and fitted. Thereafter, the internal and external motion for the loco will be looked at, the tender tank assembled and the firebox, barrel and smokebox brought together.

A myriad parts and ancillaries have to be obtained, most of which are expensive, e.g. right hand thread brake adjuster nuts cost £5 each whereas left hand £55. A wide range of parts are still required and need funding to obtain them, so if anyone can help by a gift, sponsorship or donation it would be most gratefully received.

On the positive side, most important is the fact that there is a wonderful able and loyal team. Surprisingly, despite losing Mike, Keith and a couple of other members, the actual hours worked is up on 2015 at 1729 hours (1695). However there is a need to increase the numbers as there is still much work to do on the loco and tender. Welders, engineers, spanner and paint brush wielders - anyone with any interest in the County is needed. Work meetings take place every other Saturday (for dates in 2017, refer to 'Getting Involved') plus occasional week days and the other Saturdays. All that is required is enthusiasm - especially in the winter when it is cold.

January - May

The good news is that Keith Gilbert is slowly recovering and paid Didcot and 1014 a visit recently. The bad news is that so far 2017 has been frustratingly quiet for 1014 on most fronts. Significant parts are still awaited despite being ordered months ago, including the loco spring links and tender vacuum cylinder seals.

Locomotive Progress:

The chassis has received little attention so far as the next stage requires the aforementioned spring links before dropping the wheels and doing the work required while the wheels are out.

However, some work has been undertaken, including Gary's work on the vacuum pump:



April 2017 - Gary working on the vacuum pump.



April 2017 - vacuum pump overhaul almost complete.

At Crewe the firebox overhaul is 95% complete, with only the last few stays and foundation ring rivets still to be fitted.

Meanwhile, assembly of the boiler move forward this year, the new tapered boiler barrel having been rolled by West Midlands firm Bradshaws. These will be transported to Crewe to be joined to the firebox.



03/2017 - view of the cab end of the firebox showing renewal work undertaken.
(David Bradshaw)



03/2017 - front end of the repaired firebox awaiting being joined to the boiler. (David Bradshaw)

03/2017 - front end of the firebox shewing three-row superheater holes. (David Bradshaw)

In addition, design work continues on both cross head and smokebox fronts. Confirmation of the loading gauge limitations have been received, so the saddle design can be finalised.

Tender Progress

Once again progress has been held-up by the non delivery of the tender vacuum cylinder seals, which means that the bottom plate cannot be fitted until they arrive.

The tender has been advancing underneath, with all brake beams and links fitted. Unfortunately, one rod between the adjusting screws and the actuating beam was sent to a foundry in November last for a replacement quote, since when nothing has been heard.

A priority for the tender is riveting the outer angle to the frames, but this cannot be done until an offset ram from the USA is delivered.

However, as the images show, tank bottom plate is finished and painted ready to be turned over and placed correct way up.



04/2017 - Doug cleaning the tender base prior to giving it a coat of protective paint.

04/2017 - Doug applying a coat of protective paint on the tender tank base.

Apologies for the relative dearth of news, but not a lot has been received of late, but at least there are a few pictures this time to show progress.

May - October

The first half of 2017 has been pretty awful for 1014. Next to nothing that has been done to progress the Project as suppliers for both locomotive and tender parts have been dilatory or have failed to deliver altogether. The biggest set-back has been the firebox and boiler work. During the Spring, L&NWR Crewe decided to cease work on all external projects, so they could concentrate on their own. As a result work stopped on both the Patriot and County Projects, despite Richard Croucher being told in March that there was only a few weeks work left to do, with completion due in June. Meanwhile the new boiler barrel sections had been rolled. Worse still, Crewe handed the Project an invoice requiring a payment considerably in excess of that expected, consequently the funding cupboard is bare.

In August the Project team were delighted to welcome Keith Gilbert, who made a brief visit to view progress. Sadly, Keith's death was announced in late September, thus another of the founder members of the Project Team, our Engineer no less, had been taken from us.



12/08/2017 Keith Gilbert's last visit to the Project.

Locomotive Progress:

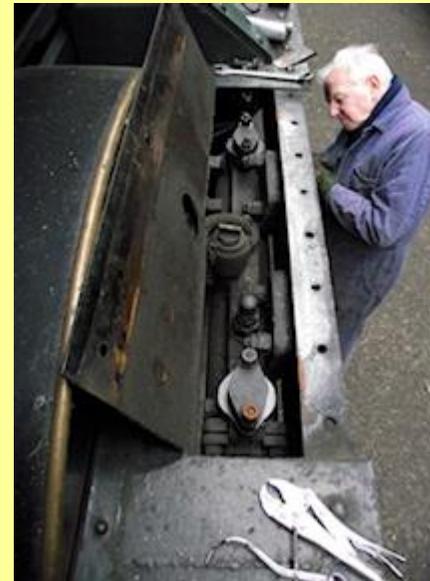
The firebox/boiler issues have dominated throughout the summer. There are three issues causing concern:

- 1) Richard Croucher reports that significant attempts are being made to get the firebox alterations at Crewe finished before they move works. Crewe have said they do not want to do the barrel and smokebox, thus David Bradshaw is looking into finding alternative suppliers.
- 2) Funding - David Bradshaw is also giving Richard Croucher a hand with fund raising and as part of this is planning an article in Railway Magazine shortly to re-launch the Project to the wider audience.
- 3) The insurers will also be contacted to confirm they will approve a small reduction in the safety valve base plate with a corresponding increase to the doubling plate.

There have been some positive developments:

1) The vacuum pump rod has arrived, so Gary has been tasked to fit it. Thereafter, the body will be painted and then fitted to the locomotive.

Following that, the vacuum cylinder will be painted. Having obtained a reasonable quote new seal will be ordered when funds are available.



06/09/2017 - Gary measuring-up to fit the vacuum pump to the County's chassis.



05/10/2017 - arrival of the spring links.

2) The spring links coupling the loco springs to the axleboxes. Keith Gilbert ordered some from a firm last November, but with nothing to show but excuses they were 'sacked' in July and re-ordered from Fabtech Ltd. in Stockbridge. They took about 3 weeks. When the wheel-drop is available the wheels can be removed and the springs fitted.

An injector casing has also been completed (ordered by Mike Cooper!) and, in July, awaited collection.

Tender Progress:

Progress was limited to painting and cleaning until relatively recently, but there have been a couple of developments which should help to move things along:

1) Painting - especially brake gear.



06/09/2017 La Donna painting brake-gear



06/09/2017 - fitting lubrication pads to tender axleboxes.

2) Fitting the worsted lubrication pads to tender axleboxes has started - these assist essential lubrication of the tender axles.

3) A major step-forward was the tender base-plate has been placed on the chassis and is now being drilled and bolted. Once that has been done, construction of the tank can be planned.

The base-plate etc. will have to be removed again in due course, so that the vacuum reservoir and brake linkage can be fitted and tested.

The vacuum tank seals were ordered in January, but despite regular phone calls nothing was forthcoming. The majority of the seals have been found in-house and a quote for the remaining seal has been received, thus a new one will soon be ordered.



06/09/2017 - fitting the tender base-plate onto the tender chassis.

Hopefully, by the time there is sufficient information for the next update, more positive progress can be reported.

November - December

Some good news to start! The loss of Keith Gilbert was obviously the low spot of the year. Keith produced hundreds of CAD drawings for 1014 (and other locos) besides being a great source of wisdom and ability. However, the services of a chap called John Williams in Norfolk who is a very able CAD designer have been secured. Furthermore, Dicky has been in contact with Chris Hoskin, a very capable engineer. Unfortunately for the Project, he lives in York, but he has already visited NRM on the Project's behalf to look out some drawings.

Many will be aware that the majority of our budgeted finances for 2017 were swallowed-up by work (some unexpected) on the firebox and boiler barrel, consequently the funds are in the 'red'. To cap it all the LNWR works at Crewe announced in May that they were stopping all work on outside contracts with immediate effect. As a result, David Bradshaw has been working hard to find a new contractor. An alternative has been

found by the Patriot Project, in which David Bradshaw was fully involved, as a few of the Crewe staff have started their own company at Butterley. Their first contract is the Patriot boiler, with the possibility of 1014 following. So, for the next year our firebox and barrel is going into store. Thus any income will be going to pay off the overdraft and work on 1014 in 2018 will be subject to a controlled spend.

To overcome the difficulties encountered, David Bradshaw used an article in the November edition of Railway Magazine (thanks due to editor, Chris Milner) to raise awareness of what is necessary to complete the County Project to complete the set of GWR 4-6-0 classes (anticipating completion of 2999 and 6880 in the next year or two).

Spear-heading his main objective to achieve this is the matter of sponsorship (also considered in 'Getting Involved'):

Boiler

- Palm Stay Pattern £1,000
- Palm Stays £165 each
- Palm Stays - Casting £100
- Palm Stays - Machining £500
- Rivet £5 each (thousands required)
- Bolt £1 (Many required)
- Superheater - Pattern £2,500 (1 required)
- Superheater - Casting £2,000 (1 required)
- Superheater - Machining £2,000 (1 required)
- 324 Crown Stays £50 each
- Main Steam Pipe £3,000 (1 required)
- Transverse Stays £300 each (30 required)
- 2 Fusible Plugs plus 2 spares £50 each
- Outside steam pipe casting £288 each

Locomotive

- 6 loco coupled axle springs £800 each
- 6 crank pins at £750 each (4 still available)
- 2 connecting rod forgings £3500 each
- 2 connecting rods machining £6700 each
- 2 coupling rod forgings trailing £2652 each
- 2 coupling rod trailing machining £7252 each
- 2 coupling rod forgings front £3200 each
- 2 coupling rod front machining £7440
- 3 Piston rod casting complete with piston rings £3702 each
- 3 Piston valve rod complete with piston rings £4638 each
- 2 Pistons £320 each
- 4 Slidebars £1,200 each

- Tubeplate £7000
- 2 Crossheads £2000 each

Tender

- Pullrods (2) £1800 each

Donations, both one-off and regular payments will also be welcome (see 'Getting Involved').

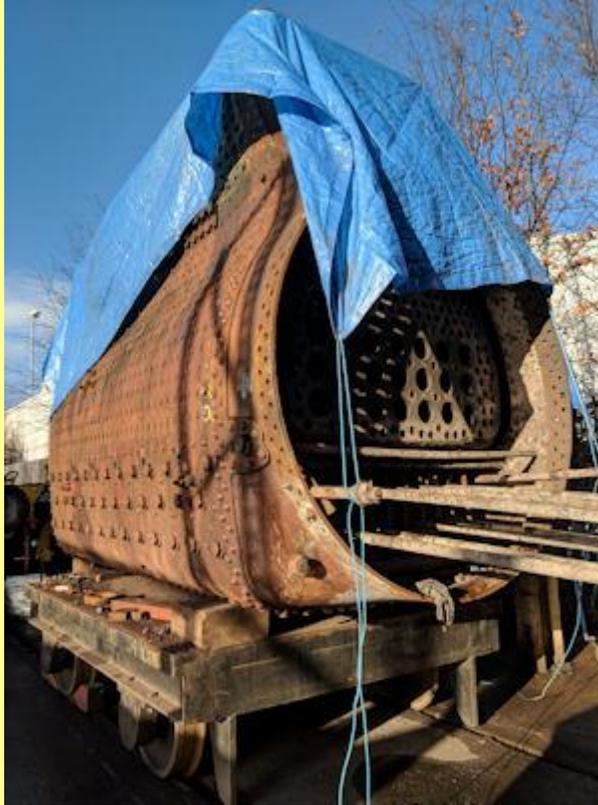
David also suggests the small volunteer team supporting 1014 is no longer adequate on its own, thus the GWS is looking to strengthen it in a number of areas: marketing/publicity, attending galas, and in engineering. if interested in lending a hand in this contact Richard Croucher – richard.croucher@ntlworld.com

As indicated, an appeal for funds to complete County Project being extended beyond GWS membership, starting with an appeal for £130,000 to complete the boiler by the end of 2019.

To date 1014 estimated to be 75% complete.

Locomotive Progress:

The boiler issues have dominated, without having much to show for it. The firebox is almost finished, remaining work to be completed is to rivet-up the foundation ring corners before leaving Crewe. Thereafter, the firebox will be placed in store:



29/12/2017 - front view of firebox at Crewe (Gavin Shell)



29/12/2017 - footplate view of firebox at Crewe (Gavin Shell).

The boiler work is likely to be undertaken by a new firm Heritage Boiler Steam Services (HBSS), established by Robert Adamson & Andrew Wilcock, former chargehand boilermiths at LNWR Heritage of Crewe. Robert Adamson started there as an apprentice, while Andrew Wilcock served his apprenticeship with Ian Riley. They are renting part of the Princess Royal Locomotive Trust's West Shed at Swanwick Junction. It was reported in Steam Railway (no. 474) that 1014's firebox is due to move from Crewe to Swanwick, where it will be stored, although formal agreement has not yet been reached for HBSS to assemble 1014's boiler.

Work on the chassis continues. After a year trying to get the axlebox links, they have now been painted and are ready to fit. In the meantime, a couple of problems have emerged regarding clearances between the wheels and frames and wheels and motion bracket, which will have to be checked with the likelihood of work being required.

While the wheel-frame clearance can be sorted out relatively easily, the motion bracket is a different matter. Designed for a Hall with 6' wheels, there is a noticeable overlap for the County's 6' 3" wheels, which may mean a redesign.

Tender Progress:

Having fitted the tank base-plate (temporarily) work on the tender continues with efforts to complete the brake system, before commencing welding of the tender tank plates, presently in store at Didcot.

Website Matters:

The aforementioned Railway Magazine article was a culmination of a process of reviewing the Projects needs and future developments. It has been suggested that the website needs a re-vamp, a view shared by the web manager. However, having looked after the website for around ten years, when website construction etc. has moved on, the webmaster feels he is not the man to undertake the modernisation, as he lacks the skills to so do (his main tutor, Mrs. Helpdesk's I.T. skills have not kept-up with those needs either), his circumstances have changed since his move to the Fens seven years ago and having passed the milestone of three score years and ten, feels it is time to wind down - there's lots of other things still to do!!

Consequently, the webmaster is giving notice that he will be standing down from this important role as soon as a replacement person is found or 31 December 2018, whichever ever comes soonest.

Anyone wishing to take-up the cudgels, please e-mail Terry indicating your interest. If the interest is confirmed Terry (and Mrs. Helpdesk) will offer all the advice we can with regard to creating and maintaining the site, as well as helping in the transfer of the hosting arrangements.

My efforts to publicise the Project will continue (see me in Newport in May!?) and I will pay the occasional visit to Didcot to keep an eye on progress. Afterall, I would like to see the fulfillment of the project!