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The Warrior

THE NEWSLETTER FROM THE LMS-PATRIOT PROJECT



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Editorial

As we start the new year there's already a tremendous amount of progress with 'The Unknown Warrior' to report already.

At the beginning of February another milestone was reached when the bogie was fitted at Tyseley and 'The Unknown Warrior' became a 4-6-0 for the first time. 2016 will also see the boiler largely completed and indeed in this issue you will see further evidence of this with the forming of the firebox outer wrapper.

Also in this issue we are launching the Sponsor our Stays (SOS) Appeal for the boiler stays. It is also very pleasing to report the tremendous response from you, our members with the sponsorship of many items. A big thank you to all who responded to our appeal in the last issue of The Warrior.

And this year we will be asking you to vote for the first livery for 'The Unknown Warrior' - with the result announced at our next AGM in November.

So all-in-all a very exciting year in prospect with lots to do and further milestones ahead.

Thank you for your continued support.

Andrew Laws. Editor

Cover photograph:

'The Unknown Warrior' stands proudly at Tyseley Works as a 4-6-0 after fitting of the bogie on 3rd February 2016.

PHOTO BY ANDY COLLINSON

MEMBER'S CHALLENGE!

As you might be aware 2016 is the 'Year of the Livery' with discussions and debates taking place through the next two editions of the magazine. The voting forms will be issued with Warrior 30. The only way you can vote for the livery of vour choice is to be a member, we have included an additional membership form with this issue for you to give to a non-member and persuade them to join so they can be part of one of the best projects in preservation.

Chairman's Thoughts – Feb. 2016

I am writing the latest 'Chairman's Thoughts' column having this afternoon (3rd February) watched the new bogie being fitted to 'The Unknown Warrior' via Tyseley Locomotive Works' wheel drop; we now have a 4-6-0 for the first time. I think you will all agree this is a highly significant stage in the build and one that is worth taking a moment for some self congratulation. Shortly afterwards the cylinder and valve liners will be fitted and the engine will be returned to Llangollen where it will be final assembled.

Serious work will start on the boiler in February with Crewe attacking the copper firebox and assembling the foundation ring and Tyseley making the doorplate and throatplate in March. The tender frames should be back in Llangollen by the end of this month.

Our appeal to members in the last Warrior was very successful; thank you to all who sponsored an item - to date we have received in excess of £25.000 in sponsorship following that appeal. There are many more items still to sponsor so please feel free to carry on the good work! An updated list is enclosed along with an appeal to sponsor a boiler stay - we need 950 steel boiler stays for the firebox which Crewe will start fitting later this year.

The number of members taking out a standing order doubled in the third quarter from 12 per quarter to 24 per quarter so that the total number of regular donors now stands at 310 against our target of 500. We will publish a visual which shows our progress in Warrior 29, in the meantime if you are thinking about it please take that final step and sign up.

2016 is going to see great progress and we should be appearing in the railway press, every month for the remainder of the year.

I note that I was a bit premature with my forecast in the last Warrior that 45551 would be a 4-6-0 before Christmas. This time it is and you can see the photographs throughout this issue. My apologies but forecasting in this environment can sometimes be really hazardous!

Thank you for your continued support.

Kindest regards

David Bradshaw, Chairman



Treasurer's Report

Financial Update to Quarter 3 (31st December 2015)

by Neil Collinson, Treasurer

Here we go again. Quarters fly by and we are almost through to the end of another financial year. On with the hopefully not too boring statistics then, these are being written the day after the quarterly board meeting, which took place in Stafford on the 23rd January.

First thought for the quarter.

Some coal has been shovelled on the fire.

Oute entirely thought up by me (see opener from Warrior 27).

Total Income for the quarter exceeded £110,000, up from £82,000 in quarter 2, which in turn was up from £63,000 in quarter 1. This is a fantastic result, another record quarter, and means that the total income of £255,000 for the first nine months exceeded the forecasted or budgeted figure of £251,000 for the whole financial year. Boiler loans of £200 were also received. However, the achievement of this record quarterly figure was again helped by a single generous company donation of £25,000, and a substantial response to our sponsorship leaflet included in the last Warrior. That appeal has produced a further £25.000.

MEMBERSHIP

The number of new members declined again during the quarter but renewals by existing members improved. Briefly, the statistics are as follows:

INCOME (previous quarter in brackets) MEMBERS' SUBSCRIPTIONS

Income from this source was £6,404 (£4,799), £412 (£416) from new members and £4,715 (£3,502) from renewals. Gift Aid claimed on these figures amounted to £1,277 (£881). There was one new life member during the quarter whereas there were none in quarter 2.

DONATIONS

Total donations (regular and occasional) were in excess of £94,000 (£70,000). There were 24 new regular donors during the quarter which is two more than the total for quarters 1 and 2 combined.

The board are extremely grateful to those members who responded to our Chairman's Letter and The Warrior appeals and instigated standing orders for regular donations. We still need more though, so please consider making a regular donation for the remainder of the build.

Second thought for the quarter. Now let's shovel more coal on.

Although the average donation has declined to £15.18 per month, down 11p from September, the total income from this source was £13,754 (£13,191) and the number of members donating this way is 308 (292). I will say it again, very many thanks to those members who have increased their monthly amount. I make no apologies for repeating that regular donations are the main source of funding upon which we can plan/forecast. Out of 1,000+ members 308 are regular donors and I would urge those 692 who do not donate to seriously consider it. The date for completion of your locomotive is set in stone and dictated by history. We cannot fail and your support is vital.

Third thought for the quarter. Your 'Unknown Warrior' needs you.

Adapted by your treasurer from that famous quote by Lord Kitchener.

Expenditure is broadly within the budget set at the beginning of the year although the decision to send out hard copies of The Warrior has increased our postage costs quite substantially. The additional costs have been more than justified by the greater response from you, the members.

Spending on the locomotive has now reached £1.134m with £25,100 spent on the tender.

BANK ACCOUNTS

We are maintaining a healthy balance of £113,000 but this year will be our most expensive yet, with the boiler scheduled to be completed and the assembly work at Llangollen moving on apace. Where possible we transfer as much funds as we can into a reserve account which earns interest and this has produced additional income of almost £200 this year. Not a lot but interest rates are still extremely low. We are due about £10,000 from HMRC by way of VAT reclaim and a further £10,000 in Gift Aid which will further increase our bank balance.

MISCELLANEOUS MUSING

We have been able to accept card payments on our sales stands for a little while now but it depends on a good mobile signal and the technology working via Bluetooth (and the resident sales staff for the weekend knowing how to work it). Training need identified methinks We have not publicised this facility but when a customer/member asks, we produce our little machine(s) and hopefully we make a sale that otherwise might have been lost.

We have now introduced a card payment facility in our office for members who telephone wanting to pay subscriptions, make donations or make a purchase of one of our sales items. The facility is there if there is no other means of making the payment. Online banking direct to our account is quick and simple for those members with that facility, and cheques are still legal for the time being. I would just like to make you aware that as with some other card transactions, fees are payable by us and the rate is 2.75%, so for every £100 the charity loses £2.75. Cheques cost us 40p.

If you have got through to the end, thanks for reading. Do read on!

I remain your hopefully valued treasurer.

Neil (C)

(Not to be confused with the other Neil on the board (Neil K) who is our Sales Director and stands on windy station platforms most weekends (with Mrs. K) promoting our cause. At least I can sit in a warm environment to do most of the treasurer's work, although you might see me on a sales stand (with the good lady wife) from time to time. I will have my badge on so if you want to ask me questions please do, but keep them simple please!)

VOLUNTEERS Please remember that the mileage rate for travel expenses has increased from 35p to 45p from 1st January 2016. A revised claim form and explanatory notes are available from the office; please send in outstanding claims as soon as possible.

Membership Subscriptions

At its January meeting the Board agreed to raise the annual subscription level from £18 to £20 from 1st April 2016 for all new members joining, and existing members renewing. There will be no increase in the Joint/Family or Life Membership categories, and we will honour all membership applications received after that date using the old forms.

Normally, we review every three years, but the decision to post all future Warriors out to you will cost us £4,000 over a full year in printing and postal costs, and the increase in subscriptions will raise approximately £3,600 - we thought that increasing the membership is better than using money dedicated to locomotive building. All members will find a membership form enclosed with this Warrior with the old rates on it. We would be very grateful if you would give this to a friend who isn't already a member so they consider becoming one. Elsewhere you will find the application form for Members' Day 2016 - it would be marvellous to welcome you and new members to Llangollen on 25th June.

And, as always, please keep adding the additional donations as many of you do when you renew – it all helps!

Richard Sant

The Warrior - Issue 28

Engineering update

by Kevin West and David Bradshaw

NOVEMBER/DECEMBER 2015

LOCOMOTIVE FRAME ASSEMBLY

Work continues on the construction of The Unknown Warrior at a number of locations. The construction of a steam locomotive of any size is a complicated engineering task and the past few weeks have proved it to be just that. While it may appear that not a lot is happening above the surface, in fact the eight-legged duck is paddling furiously although perhaps not all in the same direction!

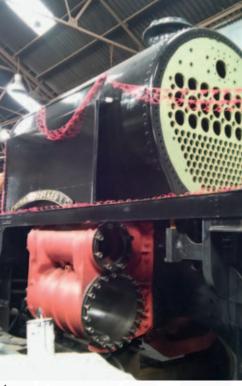


▲ The Unknown Warrior on display at Tyseley Locomotive Works, 24th October, 2015.

Following the arrival of the locomotive at Tyseley work has not progressed at the pace we had expected due to a number of reasons. The major reason has been the discovery that the Cylinder and Valve Liner castings all required replacement due to having voids and blow holes in the castings. This was not discovered until the castings had been part machined. Replacement castings have now been produced and proof machined by the foundry and are due to be moved for final machining this week. Once the machining has been completed they will be moved to Tyseley for shrink fitting into the Cylinders.

In preparation for the liner machining detailed measurements of the cylinders were taken to establish the diameters required to ensure the correct fit into the cylinder castings.

The fitting involves the liner being immersed in a tank of liquid nitrogen which make the liner shrink slightly so that it be inserted into location in the cylinder. As the liners warm up and expand to normal size they become a slight interference fit in the cylinder casting which holds them in position. A number of set screws provide a final location. The interference required on our cylinder liners of 193/16" outside diameter is only three thousands of an inch.



▲ Left Hand Cylinder with Covers and Slide Bars removed in preparation for the liners to be fitted. PHOTO: KEVIN WEST

The 155 drawings obtained from the National Railway Museum, York and Glasgow University have been catalogued and filed for easy access when required. Back at Llangollen parts continue to arrive for fitting when the locomotive returns. These include the Guard Irons.



▲ Guards Irons at Llangollen.

PHOTO: JORDAN LEEDS

The Sandbox Necks have been machined at Harco and will be sent to Llangollen for fitting to the frame when the engine returns.

BRAKE SYSTEM AND LUBRICATION SYSTEM

Refurbishment of the Locomotive and Tender Brake Cylinders from 8F No. 48518 continues at Harco Engineering.

Design work continues for the lubrication system. A replacement body and new lid castings for the Mechanical Lubricator under overhaul at the Great Central Railway have been produced and delivered to Loughborough.



▲ Lubricator Body Casting





Lubricator Lid Casting.

PHOTO: KEVIN WEST

Design work for the lubrication pipework runs, fittings and clips continues.

The Brake Hangers have been moved to Llangollen Engineering for machining which is due to be completed in January. Drawings for the associated pins, nuts, etc. have been finished and requests to manufacture have been sent out for quotation.

PISTONS, VALVES AND MOTION

As detailed at the beginning of this report the castings obtained for the cylinder and valve liners had to be rejected due to casting faults. New castings have now been produced using a modified casting method and a sample has been proof machined with encouraging results. We expected the castings to be delivered for final machining at the end of December.

Castings for the Pistons have been made and will be delivered to Tyseley soon. An order for Tyseley to supply completed Piston and Valve assemblies has been raised. These include finished Pistons, Piston Rings and Piston Rods and Valve Heads, Rings and Rods.

Drawings for the Gland and Stuffing Box parts for the Piston Rods and Valve Rods are in progress to enable manufacture. Llangollen Railway Engineering are also progressing the manufacture of the Coupling Rod Bushes and Brasses.

Machining of the cast Expansion Links is underway.



One of the Expansion Links undergoing machining. PHOTO: CMS CEPCOR LTD.

The Inside Connecting Rod assembly has made a major step forward with the machining of the Big End Strap by CMS Cepcor in Coalville. To ensure the correct fit to the Inside Connecting Rod, the rod itself was moved to CMS in mid-December. It was set up on a large milling machine to measure the mating faces which were given a light skim to remove some slight pitting which had occurred since the rod had been removed from Jubilee No. 45697 'Achilles' in 1967.

Drawings for the pins, nuts and other parts required for the Big End assembly have been finished and delivered to CMS Cepcor to manufacture.

Castings for the Big End Bearings have also been procured. Quotations for machining to finish are being obtained.



▲ The finished Big End Strap.

PHOTO: OAKWOOD VISUALS



▲ Inside Connecting Rod undergoing machining. PHOTO: KEVIN WEST



Big End Bearing casting.

PHOTO: PREMIER PATTERNS

A number of parts for the motion have also been acquired over the last few weeks. The inside valve gear eccentric halves have been cast and delivered to Harco for machining. Also at Harco are the Reversing Shaft Trunnion castings and bearings. The Inside Crosshead has also been cast and now awaits machining. Casting has taken place of the Outside Valve Crosshead Brackets.



Eccentric castings.

PHOTO: KEVIN WEST

The Cylinder Relief Valve Body castings have been ordered. Once they are to hand they will be sent for machining. The castings for the valve Spring Holders have been ordered wth the valves being ordered soon.

BOGIE

The Bogie Wheelsets have finally had their tyres profiled and fitted at the London Midland depot at Tyseley just before Christmas, after a delay in finding time on the lathe. The local London Midland DMU fleet had experienced a number of wheel flats over the late autumn and this obviously took precedence over our wheelsets.



▲ A selection of castings at Premier Patterns: Valve Crosshead Bracket, Sandbox Lids, Reverser Shaft Trunnions, Lubricator Body and Inside Crosshead. PHOTO: KEVIN WEST



Crosshead casting.

PHOTO: KEVIN WEST



▲ The Bogie Frame under assembly at Tyseley. PHOTO: DAVID BRADSHAW



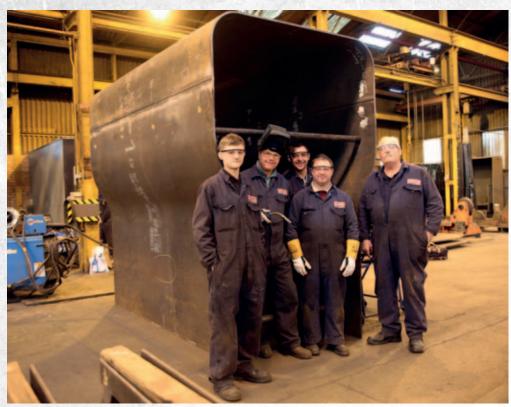
The Bogie Wheelset after tyre turning. PHOTO: KEVIN WEST

Assembly of the bogie is nearing completion at Tyseley Locomotives Works. The bogie frame is now complete with Side Control Springs and Beams in place. Some remedial machining was required on the Bogie Centre Pin casting and the fitted bolts to fit this and the Bolster Plates to the locomotive chassis are on order.

The Axleboxes for the new wheelset have been white-metalled and machined ready for fitting.



▲ Outer Firebox Wrapper sheets during forming PHOTO: OAKWOOD VISUALS at Deepdale Engineering.



▲ The Deepdale Engineering team with the Patriot firebox outer wrapper which was completed in January.

BOILER

Preparation work continues at Tyseley Locomotive Works for the forming of the Outer Firebox Steel Flanged plates.

The Outer Firebox Wrapper sheets were formed at Deepdale Engineering in early January 2016. The three sheets were then prepared for welding before delivery to LNWR Heritage, Crewe.

At LNWR Crewe, the Inner Firebox Crown and side sheets are expected to be welded in the next couple of weeks. The assembly of the Inner Firebox is due to start at the beginning of February.

The two barrel rings are ready to be riveted together when there is capacity in the works. The Foundation Ring components are ready to be sent away for machining before welding in the side sections.

LNWR Heritage have agreed the completed boiler will be ready for delivery in January 2017.

The welding was completed on 14th January.

TENDER

Work on the refurbishment of the Tender Frames continues at Rowlescourt Engineering.

Final machining of the new welded dragboxes for both front and back has been completed and they have been installed in the frame assembly.

Rowlescourt had intended to complete the chassis repair by the end of the year, to allow the chassis to be returned to Llangollen for the drag boxes and outer flanges to be riveted in place. Due to an influx of commercial work in late November and December we now expect the Tender Frame to return to Llangollen around the end of January.

Design work on the new tank which will be of welded construction with dummy rivets is continuing taking into consideration the requirements for new main line running regulations.

FUTURE WORK PLANNING

Following fitting of the cylinder and valve liners, and the bogie assembly at Tyseley Locomotive Works, the locomotive will return to Llangollen. This is now expected to take place in February.

Once back at Llangollen work will continue on setting up the Inner Slidebars.

A start will also be made on the lubrication pipework.

APPEAL **SPONSOR OUR STAYS**

Our latest appeal is 'Sponsor our Stays' (or SOS!) for the boiler stays. Around 1,500 stays are needed for The Unknown Warrior's boiler.

For those who are unsure, a stay is a steel or copper rod that joins the inner and outer firebox together and sits in the water space between the two. There are side stays which are theaded and screwed into the copper inner firebox and riveted to the steel outer firebox and crown stays which join the top of the firebox to the inner firebox. There are also longitudinal stays which run the full length of the boiler.

Please consider sponsoring a stay.

Please send your donation with a note stating

'SOS - SPONSOR OUR STAYS' to:

The LMS-Patriot Company Ltd, The Hub, 17 Eastgate Street, Stafford ST16 2LZ or contact us on sponsorship@lms-patriot.org.uk

Thank you for your support.

JANUARY/FEBRUARY 2016

The big news for this month is The Unknown Warrior became a 4-6-0 on Wednesday 3rd February at Tyseley Locomotive Works, with the fitting of the bogie. This was accomplished by using the ex-Ipswich wheel drop. The completed bogie was lowered into the drop (see picture on page 15) before the locomotive was rolled into position above. The bogie was then raised up into position. After a few nervous moments to check clearances and an adjustment to a Stretcher the bogie reached its correct position taking the weight of the front end of the locomotive.







The replacement Valve Liner castings are now in the final stages of machining and once completed will be moved to Tyseley Locomotive Works for shrink fitting into the Cylinders. Unfortunately, two of the replacement Cylinder Liner castings have also proved to be unacceptable with similar issues and we are now waiting for further castings.

Shortly before Christmas some issues were found with Stretcher 4 on the Frame Assembly. As various areas had previously been found problematical and repaired on this casting it is believed further distortion had occurred, so it was decided to replace the casting completely. A new casting has been obtained and machined ready to fit to the frames once they arrive back at Llangollen.



Stretcher at Harco Engineering рното: KEVIN WEST

Other parts ready to fit to the locomotive frames once they arrive back at Llangollen include the Reverser Shaft Trunnions. The Sandboxes and Necks are also ready to fit to the Frames.





Reverser Shaft Trunnions and Crank Pin fittings at Harco Engineering.

The Sandbox Necks awaiting delivery to Llangollen PHOTOS: KEVIN WEST

BRAKE SYSTEM AND LUBRICATION SYSTEM

Design work continues for the lubrication system. The new body and lid castings for the Mechanical Lubricator are at the Great Central Railway, Loughborough for completion of the large mechanical lubricator.



Brake Cylinders under overhaul at Harco Engineering. PHOTO: KEVIN WEST

PISTONS, VALVES AND MOTION

As detailed at the beginning of this report the original castings obtained for the cylinder and valve liners had to be rejected due to casting faults. The Valve Liners are now in final stages of machining and replacement castings for the Cylinder Liners are awaited from the foundry.

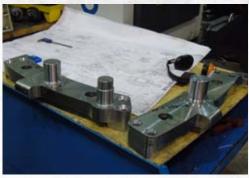
The castings for the Pistons have been delivered to Tyseley ready for machining. Tyseley are going to supply completed Piston and Valve assemblies including matching the Crossheads to the Piston Rods. The new Inside Crosshead will be delivered to Tyselev following machining and the two original Outside Crossheads will move from store at Llangollen to Tyseley for this work to be completed. Drawings for the Gland and Stuffing Box parts for the Piston Rods and Valve Rods are in progress to enable manufacture.

Llangollen Railway Engineering are also progressing with the manufacture of the Coupling Rod Bushes and Brasses.

Machining of the Expansion Links is almost complete at CMS Cepcor.

Drawings for the pins, nuts and other parts required for the Big End assembly have been finished and delivered to CMS Cepcor to manufacture.

An order for the Eccentric Sheaf Halves has been placed with CMS Cepcor.



The Expansion Links after machining.

PHOTO: KEVIN WEST



▲ The Eccentric for the inside Valve Gear after machining at Harco Engineering.

PHOTO: KEVIN WEST

CAD work on the Inside Eccentric Rod has been completed and will be sent out for quotation soon.

Castings for the Big End Bearings have also been procured. Quotations for machining to finish are being obtained.

The order for the Eccentric Sheaf Halves has been placed with CMS Cepcor and the flame cut blank has been delivered prior to machining.



The flame cut blank for the Eccentric Sheaf Halves at Rowlescourt Engineering on 11th Feb. PHOTO: KEVIN WEST

The Cylinder Relief Valve Body castings that were ordered last month have been cast, but have had to be returned as the casting quality was not as expected. Replacements are awaited from the foundry. We await delivery of the castings for the valve spring holders. The valves will be ordered next.

BOGIE

Assembly of the bogie is complete at Tyseley Locomotives Works. The final work on the frame was to rivet over the ends of the End Stays to the Frame. This was undertaken at the end of January. The Axlebox machining was completed prior to being mounted onto the wheelsets, ready for wheeling.

The Bolster Plates and the Bogie Centre Pin have been mounted onto the locomotive chassis using the specially made fitted bolts.



he completed Bogie Frame being lowered onto its wheelsets at Tyseley.

he completed Bogie Frame at Tyseley Locomotive Works.





BOILER

Preparation work continues at Tyseley Locomotive Works for the forming of the Outer Firebox Steel Flanged plates.

The cast forming block for the Doorplate is at Tyseley waiting for work to start. Detailed discussions have been had with Tyseley on the Forming Blocks for the more complicated Throatplate. We will require five different blocks to enable the complicated shape to be hammered into the steel plate. Quotations for the castings have been obtained and once the final details have been sorted they will be ordered.

The Outer Firebox Wrapper sheets have been welded at Deepdale Engineering in preparation for delivery to LNWR Heritage, Crewe.

At LNWR Crewe, the Inner Firebox Assembly is starting to take shape, with drilling of the plates taking place prior to a start being made on assembling the parts of the copper firebox together. The copper crown and side sheet welding is due to be completed in the next couple of weeks.

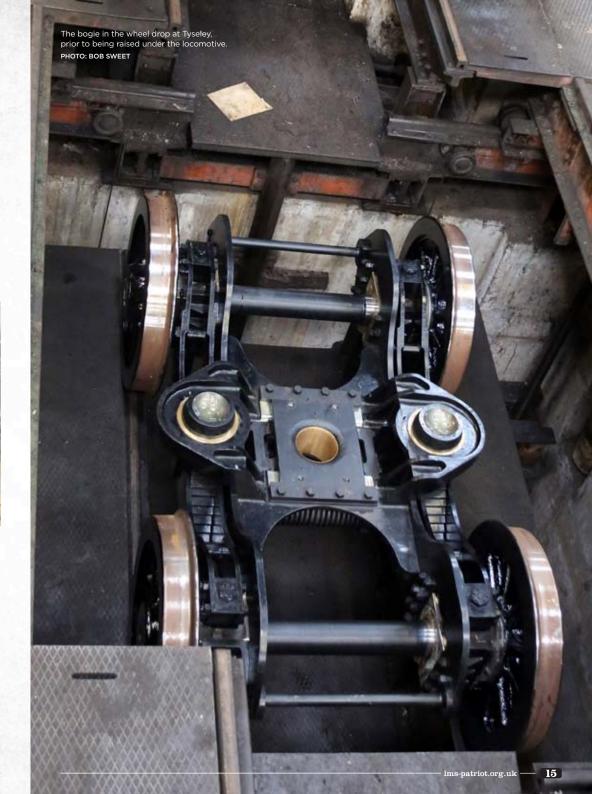


Inner Firebox assembly underway at LNWR Crewe. PHOTO: GAVIN SHELL

The two barrel rings are ready to be riveted together when there is capacity in the works. The Foundation Ring components are ready to be sent away for machining before welding in the side sections.

Discussions are underway with our Boiler Insurance company regarding the design and manufacturing processes for the Dome and Cover. The original was made from three pieces and each part would have been pressed from sheet steel of the required grade. The tooling for this would be very expensive to produce just one part. Discussions at present are looking at either casting or fabrication as suitable methods.

LNWR Heritage have agreed the completed boiler will be ready for delivery in December 2016.





▲ CAD Data image of the Dome.

PHOTO: KEVIN WEST

TENDER

Work on the refurbishment on the Tender Frames continues at Rowlescourt Engineering.

Due to an increase in the commercial workload at Rowlescourt completion of the chassis restoration was delayed beyond the expected completion at the end of December. Work has now restarted with good progress made.

The new dragboxes for both front and back have been machined and tack welded into the completed frame assembly. A few finishing jobs are required before the chassis is moved back to Llangollen around the end of February.

Once back at Llangollen work will start to replace all the rivets removed during the Frame Restoration. This will be undertaken by both the Llangollen Engineering staff and our members Jordan Leeds and Matt Jervis on a volunteer basis. Both Jordan and Matt are members of the Llangollen Engineering boiler shop staff.

Design work on the new tank which will be of welded construction with dummy rivets is continuing, taking into consideration the requirements for new main line running regulations.

With the tender chassis back at Llangollen a start can be made on refurbishing the axleboxes and preparing for the chassis to be wheeled. Some work is still required on the brake gear before it can be refitted.

FUTURE WORK PLANNING

Following fitting of the Cylinder and Valve Liners and the Bogie assembly at Tyseley Locomotive Works, the locomotive will return to Llangollen. This is now expected to take place towards the end of February.

Once back at Llangollen work will continue on setting up the Inner Slidebars.

A start will also be made on the lubrication pipework.



A Mathew Walker guides the new Front Drag Box into place on the restored Tender Frames at Rowlescourt Engineering on 11th February. PHOTO: KEVIN WEST



Mathew Walker and Andrew Kennedy from Oakwood Visuals inspect the new Front Drag Box in place at Rowlescourt Engineering. PHOTO: KEVIN WEST



▲ Mathew Walker clamps the new Front Buffer Beam into place.

PHOTO: KEVIN WEST

Volunteers' Report

by David Hughes

Since the departure of the locomotive from Llangollen and the completion of the tender wheels in mid-October the team has had a winter lay off and consequently there is not much to report

As you will have seen in the photograph of the inside connecting rod being machined (page 8) it had a thorough derusting and received two coats of primer and a red undercoat. Other work which has been carried out away from Llangollen has included the restoration of a number of fittings from the old tenders. These had been unceremoniously torched from the tenders because the nuts and threads had virtually rusted away. After much hacksawing, the grab handles and several brass fittings were removed from steel cut outs. The handles have had an initial coat of primer for protection and the brass bosses have been polished.

There are enough small grab handles for the rear of the tender and the smoke deflectors but they will require restudding before they can be used. One of the long ones for the front of the tender has still to be unearthed from the storage container. The pressure and vacuum gauges are in the process of being cleaned and polished.

The impending return of the tender frames will give us something substantial to work on whilst we await the return of the locomotive from Tyseley which is now expected to be towards the end of February.

MODEL OF 'THE UNKNOWN WARRIOR' AT PROLT WEST SHED

Pictured below is a model of 'The Unknown Warrior' made from wood and aluminium sheeting by Eddie Dolby. The model can be found in the upper floor library at the Princess Royal Class Locomotive Trust 'West Shed' at the Midland Railway - Butterley, Ripley in Derbyshire where more models made by Eddie can be viewed. The West Shed is home to the PRCLT fleet including 'Duchess of Sutherland' (currently on main line duties, 'Princess Margaret Rose', Standard 4MT tanks No. 80080 (currently on load to the ELR) and No. 80098, two ex-Butlins 21" gauge locomotives, historic carriages and has a large viewing area of the workshop. For more information visit www.prclt.co.uk



Can we plan for victory in 2018?

by Colin Hall

The Unknown Warrior may be unique amongst the current crop of new-build steam projects - we have nailed our colours to the mast by declaring an objective of main line running by 11th November 2018, the Armistice Day centenary. This is an exciting prospect that is attracting interest which can only grow as we get closer to the finishing line. That apart, I think it is generally a good thing for projects to have an end-date to concentrate efforts. It is also normal for such projects to have a plan.

But planning for new-build steam is not easy. Most of all, for a charity dependent on private support, guaranteed funding is, well, far from guaranteed; in the first years of our project the future was far from certain. Second, management control is difficult: our locomotive is being built very differently from its ancestors - there is no production line, no single site management, and a host of different suppliers to contend with. Members see how problems with just a few components can blow holes in any objective or forecast - and planning cannot control or solve that on its own.

So why has the LMS-Patriot Board decided to adopt a plan-based approach for the completion of the project?

When we were applying for grants in 2014/15, several potential charitable trusts asked for a project plan. And we put some notional schedules in place for that purpose. But as 2018 approaches, we expect that potential partners in the launch of The Unknown Warrior will be seeking proper assurance that we will hit the target. Last but not least, it is possible that spending more time on longer-term planning will help improve our project performance: or at least allow us to see 'around the corner' a bit, and improve our forecasting and general communication.

We are initially focusing our planning on the 'pre-boiler' assembly work at Llangollen and of course the boiler manufacture at Crewe. It will clearly benefit all parties to have as good a view as possible of our forward programme.

Dave Owen, the Chief Engineer at Llanrail Engineering, is very supportive of this approach and has already helpfully provided detailed input. We are currently working with him to get the best match possible between our ability to supply components and a sensible assembly sequence. We want the plan to be in place and the clock to start ticking when we get the locomotive back to Llangollen as a 4-6-0. At that point, we expect the locomotive to be there until it finally steams.

We are also working with LNWR Heritage, Crewe to establish key milestones to the promised January 2017 delivery of the boiler. See our indicative programme on the right.

How are we putting the plan together? I am using project management software to assemble the plan components into a dated forward programme. That is the difficult bit. Once that's done, it is more straightforward to update and plot the impact of any delay. Not quite 'touch a button and the whole thing moves' but a whole lot easier than starting all over again. This will only work of course with regular two-way communication with our main suppliers - which we will maintain as we already do for real-time progress management. The updated plan will be the subject of regular review and communication.

We go into this with our eyes open - as the cliché says, it is hard to predict the future. Remember too what Winston Churchill said: "Plans are of little importance, but planning is essential."

We will give it our best shot.

2016 Boiler Assembly Programme Indicative draft for confirmation with LNWR Heritage Crewe

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MORRIS LUBRICANTS PLEDGES SUPPORT FOR NATIONAL **MEMORIAL STEAM ENGINE**

Britain's leading family-owned lubricants manufacturer, Morris Lubricants, is backing the exciting £1.75 million project to build the new National Memorial Engine.

The Shrewsbury-based company, the market leader in steam heritage lubricants, is enthusiastically supporting the project to build The Unknown Warrior, it is planned to complete the 81 tonne engine in time for the 100th anniversary of the Great War Armistice in 2018.

The in-progress steam locomotive is currently visiting Tyseley Loco Works, near Birmingham, for assembly work where it has recently become a 4-6-0 after the fitting of the bogie. The locomotive is being assembled from a multitude of parts, many of which have been cast and machined in the West Midlands.

Failure to preserve any of the original 52 Patriot locomotives, which steamed from 1930-62, has left a massive gap in the story of LMS express power. 'The Unknown Warrior' will provide the link between the Royal Scot and Jubilee classes and enhance the UK steam collection.

The announcement in the Sponsorship News section on the Morris Lubricants website

Morris Lubricants has contributed towards the cost of manufacturing the pattern for the bogie centre casting. In addition, the company is providing the metalworking lubricants during the manufacturing stage and all the specialist steam lubricants for the new locomotive when it's running.

"We are delighted to support an exciting project of national importance," said Morris Lubricants' managing director Andrew Goddard. "As the new national memorial engine, The Unknown Warrior will be a locomotive close to the hearts of the nation.

"As the market leaders in steam heritage lubricants, our support for this project reinforces the company's longstanding commitment to this sector."

The engineering skills and facilities necessary to produce a new steam locomotive in the UK are in place and proven, also many original LMS drawings have been obtained. New drawings have been created using CAD techniques where the original drawings cannot be found.

Parts for the new loco are being sourced mostly from UK suppliers and the project team has introduced pioneering manufacturing techniques. Assembly of the 'The Unknown Warrior' began in 2009 led by Dave Owen, Chief Mechanical Engineer at the Llangollen Railway Works. Other workshops around the UK involved include The Boro Foundry, South Devon Railway Engineering, L.N.W.R Heritage, Harco Engineering, Premier Patterns and Castings, Coupe Foundry and Tyseley Locomotive Works. Most of the parts for 'The Unknown Warrior' are being made from new. However, two Fowler

designed tenders from Barry scrapyard have been obtained. The best parts of both are being overhauled and a brand new tender body is being built.

Fundraising for the project stands at around £1.35 million, with another £500,000 needed. The new locomotive will serve as a permanent memorial to all those who fought and died in the First World War and subsequent wars. The project has been endorsed by The Royal British Legion, which will have its logo on the engine.

"The Unknown Warrior is making excellent progress," explained David Bradshaw, LMS-Patriot Company chairman, who launched the project. "The engine is about on its wheels, then the next stage is to fit, amongst other things, the lubrication system which is quite complicated with a lot of pipework. There are two lubricators

on the loco which pump oil around the system.

"We aim to finish the chassis, boiler and tender all around the same time and are currently on track to meet the steam date of autumn 2017.

"We were delighted when Morris Lubricants agreed to sponsor the pattern for the bogie centre casting and to supply all the lubricants for the loco when the engine is running. It's great to be associated with a firm that is so committed to steam and we would like to extend the relationship further in the future."

Mr. Bradshaw, also a key member of Didcot's Great Western Society 'County' project, is supported by a team of nine directors and around 30 active supporters. The project is being funded by public donations, regular contributions, legacies, commercial sponsorship and grants.



www.morrislubricants.co.uk

Preparing for the Main Line

by Colin Hall

As the ticking clock moves us inexorably towards 2018 and our goal of main line running, we are working on what we need to do to get The Unknown Warrior approved for that purpose.

Many of our members will know that extra safety and control equipment has to be fitted to the locomotive for the main line. The traditional Automatic Warning System (AWS) fitted to steam locos in active service is now supplemented by the more recent Train Protection and Warning System (TPWS); an On-Train Monitoring Recorder (OTMR) logging real-time safety information; and GSM-R radio communication. Our project will be planning the supply and installation of these systems. In the not too distant future, we will also have to equip with the new European Rail Traffic Management System (ERTMS) as it is rolled out across the main railway by Network Rail. (Its trial installation on the Cambrian Coast

already precludes steam operation on that route, Common Safety Method for risk evaluation and Guidance on the application of

until a system designed for steam has been developed and approved.)

Main line operation is also subject to rigorous certification requirements.

The good news is that steam locomotives (or rather 'vehicles operated for strictly heritage or touristic purpose') are now exempt from the requirements for approval under the latest version of the European Rail Interoperability Regulations (provided they clock up no more than 15,000 miles per year - Tornado was not so fortunate in 2008/09).

Certification for steam is now delivered under the ORR - formerly HMRI - Railways and Other Guided Transport Transport Systems Safety Regulations 2006 (as amended) (ROGS), with most recent guidance published in October 2014. This places heavy emphasis on meeting the requirements of another ORR Guidance document concerning Common Safety Methods - Risk Evaluation and Assessment. In brief, this requires the whole project to apply a risk management approach to demonstrate that the locomotive is safe to run: all this has to be properly documented, and supported by an independent safety assessment (using a competent body known as an Assessment Body - AsBo for short).

Still more guidance comes in the form of a 2014 industry document Operating Non-Main line Vehicles on Main line Infrastructure. Don't be put off by the title (or the picture of the tram on the cover): it might seem odd that we are classed as 'non-main line', when that's what we want to be; but that is a product of the evolving legislation.

This guidance makes clear that both ourselves as the 'project entity', and our Train Operator, are subject to very similar requirements. It is in fact the Operator who has to take forward many elements of overall certification, including the

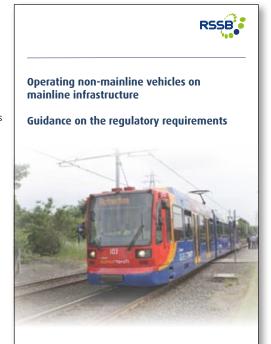
crucial Demonstration of Route Compatibility with Network Rail - a meaty process including, for example, gauging clearance, route availability and other wheel/rail interface issues. But they will need our support.

These requirements could lead to duplication of effort - so it is important that we reach a clear understanding with the key players on what needs to be done by whom. This will include follow-up work with the ORR on our approach, building on an initial discussion in 2012. There could be scope to collaborate with other emerging new build projects at a similar stage of development, to smooth the way.

We have already taken advice from an Engineering Consultancy on specific design issues for the modern railway - for example gauge clearance for the locomotive chimney to ensure that we are on the right track. We are also taking steps to ensure that all our safetyrelated documentation (product design and manufacturing certification) is properly assembled and catalogued.

In the coming months we will be deciding how to organise the work we need to do - in particular on certification and risk assessment and management.

The clock is till ticking... but we can get there.



Colin would like to acknowledge the advice and feedback he received from the A1 Locomotive Trust and RSSB on their experience, in the course of his research on the requirements.



Sir Henry Fowler, K.B.E. 1870-1938

by John Kyte

Sir Henry Fowler was not only a recognised international railway engineer, but was a scientist, mathematician and a first class organiser, which was evident by his great contribution to the war effort for which he received his knighthood. Growing up in a close knit family whose ancestors were Quakers,



Henry was a stalwart member of the Church of England and followed his faith and principles in his everyday life.

He demonstrated these in his concern for the welfare of people men on his regular inspections with whom he worked and lived among, the employees of the railway companies, (who showed him great respect as an engineer and as man who would stop for a

friendly word with the shop floor of the construction of the locomotives), the workers at the Royal Aircraft Factory, the men of Spondon who were serving at the front in WW1, the villagers,

hospital boards, the Boy Scouts, his old School at Evesham and his family. Despite his busy workload he would always make time for people not only in the engineering world but in his local community, for example mowing the grass and keeping the local churchyard tidy, and on one occasion locating an umbrella to provide protection to a bride when rain threatened to ruin her dress.

Such events earned him much praise throughout his life and after his death bore tributes to him. Some of these are reproduced in my book Sir Henry Fowler, K.B.E.

Sir Henry Fowler 1870 - 1938 Locomotive Engineer Chief Mechanical Engineer - The Midland and LMS Railways. Knighted for his contribution to the 1914 - 1918 war effort. President of the Inst. of Mechanical Engineers 1927. Born and bred in Port Street Attended Prince Henry's **Grammar School**

The plaque commemorating Sir Henry Fowler on the wall of the Signal House, by Evesham Station. It was unveiled by the Mayor of Evesham at a ceremony on 27th January 2016.

His energy and his commitment to all these tasks and his selflessness in the interest of others, may have contributed to his early death at the age of 68.

Being born and receiving his early education in Evesham where industry was agriculture and food production, poses the question on how he became such a distinguished engineer and how he eventually became the President of the Institution of Locomotive Engineers, the Automobile Institute and the most prestigious Institution of Mechanical Engineers.

The answer, I believe lies in his early years in Evesham. As a young boy he was surrounded by his father's work as a designer and renowned cabinet maker. Henry gained the ability to read drawings and use woodworking tools. At the age of nine Henry gained admission to Prince Henry's Grammar School Evesham, an association which remained with him all his active life. As the school was some distance from Henry's home he together with some friends had to pass the LMS and GWR Stations providing him with the opportunity of seeing locomotive engineering every day of his journey to school.

At school he received a first class education in mathematics and science from the Headmaster, the Reverend Sealey Poole MA, a mathematician and scientist.

Science College, later Birmingham University. In attending the college Henry would have also travelled on the railway and would have seen the science of steam in operation. His interest in metallurgy was furthered by Professor Turner which added another dimension to his knowledge that would meet the requirements of the railways who were desperate to recruit designers and engineers for the vast expansion of the systems. In joining the Lancashire and Yorkshire Railway he worked under the direction of Chief Mechanical Engineer, John Aspinall, one of the leading locomotive engineers of his day. So began a brilliant

Henry was encouraged by his

teachers and at the age of 15

gained a place at the Mason

engineering career which led to the many locomotives for which Sir Henry was to be credited. Although his talents were somewhat curtailed by the "small engine policy" it was obvious that his designs for more powerful locomotives would have put the LMS at the forefront of locomotive development. His final designs for the 'Royal Scot' and 'Patriot' confirmed his outstanding ability.

The new Patriot now being built is a wonderful tribute to Sir Henry Fowler and will prove his outstanding contribution to the engineering world.

My book, Sir Henry Fowler K.B.E., which is based on his life from his birth in Evesham, through his school days and his career, contains local details and correspondence and the possible reason why he was influenced to follow his locomotive engineering path. It is priced at £8.00 plus £2.00 postage and can be obtained from:

John Kyte, 39 Badsey Lane, Evesham WR11 3EX.

The book can also be purchased from Lulu (www.lulu.com). Details of the book can be found on our website:

valeofeveshamhistory.com with a link to the Patriot Project.

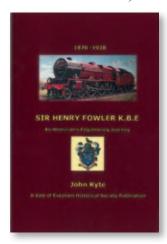


PHOTO: JOHN KYTE



Spotlight on Colin Hall

Colin Hall was appointed as Planning Director of The LMS-Patriot Company in November 2015 and as can be seen in the photograph below volunteers on our 'southern' sales stand.



Did you see 'Patriots' in steam days?

Yes - my old Combined Volume - gathering dust for years - says I saw 13. But I saw only one named unrebuilt version - No. 45523 'Blackpool'.

If so, where was this?

I lived in Hampshire as a boy, but was allowed to travel alone to my grandma's in Derby - so it will have been there, or in even more exciting forays from there to Crewe and Manchester.

How did you get involved with The LMS-Patriot Project?

In 2013, I rediscovered in retirement my boyhood interest in steam and started taking photographs (see next page). I went to my first Mid-Hants Gala in October that year and met Robert Wells on the Patriot stand - up until then I had not appreciated that no Patriots had survived! So I volunteered on the spot.

What do you do for the Project as a volunteer?

I work on the 'southern' sales stand, and further afield if need be. This work is an eye-opener - it is the first time in my career that I have done sales

promotion, and what a range of people you meet! I have also had a go at tracking down charities for grants - with one success. The truth is that as a new-build project, we are generally ruled out of conservation/heritage grants.

What's been the best Gala or Event you have been involved with so far for the Project?

The hectic Saturday this month (January) at the London Model Engineering Exhibition at Alexandra Palace. Brian Johnson and I were rushed off our feet. But another busy gala Saturday at Keighley last February comes a close second.

What is your role as a Director for the Project?

I am concentrating on planning the completion of the locomotive and its readiness for main line operation (see separate articles in this issue). I am learning new practical planning skills to set alongside my general management experience in the railway industry.

What has been the best part about being a volunteer/director for the Project?

As a volunteer, doing work that was completely new to me, with the human interest that brings. As a Director, it is early days, but finding out how I can add value to an established Board is nice.

Why do you think The LMS-Patriot Project has caught the public's imagination and has been the success it has been so far?

I think that the Commemorative connection and - linked with that - our 2018 goal set it apart from other projects. I was moved by the dedication ceremony at Alrewas in 2013. I also think that

- apologies to GWR - the Patriot class is the most distinguished of the main line steam repertoire which did not survive the end of steam.

What is your favourite Heritage line?

That question is a bit like 'who is your favourite singer?', almost impossible to choose from the top 5 or 6, but would go for the Severn Valley Railway if pressed. Since 2012, I have been to them all in pursuit of my photography interest.

Where would you like to see 'The Unknown Warrior' run when it steams?

Do you know, I really don't mind - providing that it does, and when we want it to.

Do you think steam will be on the main line in 10 years time?

Yes, definitely. Why ever not?

Do you think steam has a place on today's modern, high-speed network?

There seems no shortage of interest in niche market steam operations, despite the passage of time. I have lost count of the number of times I have seen steam photos in the national press at Ribblehead and elsewhere. Track access realities. on busy 125mph main lines already limit the scheduling options and will continue to do so. But that's life.

What are the current issues of running steam on the main line?

Everyone is aware of the increased regulatory focus on safe steam operation: there is no doubt that any train operator these days has to work hard to meet the essential safety management requirements for a busy high-speed railway.

I think the steam movement needs to get better at ensuring the reliability of its service offer. I lose count of the number of excursions listed on the UKSteam website that get cancelled or postponed for all sorts of reasons; loco availability, pathing, gauging, mechanical failure.

We have a long-suffering market in that respect, and we need to do better for them and new customers too.

Examples of Colin's photography are seen below with (top) Southern Region 'Schools' Class 4-4-0 No. 925 'Cheltenham' at Highley, September 2013, (centre) GWR Manor Class 4-6-0 No. 7828 'Odney Manor' and finally Stanier Class 8P 4-6-2 No. 46233 'Duchess of Sutherland' working a Cumbrian Mountain Express in August 2014.







Gallipoli

by Richard Sant

During November last year my wife and I visited Turkey as part of a countrywide tour which took us to the various war memorials set up by the Commonwealth War Graves Commission (www.cwgc.org) especially Anzac Cove and Lone Pine. It was not organised by the Royal British Legion, but there were some Legion members and others with us looking for family members or other names local to their areas or regiments.

By early 1915, the war on the Western Front in France had reached a stalemate. The Gallipoli campaign was intended to break this deadlock, to take

the Ottoman Empire out of the war and open up a supply route to provide Russia with much needed supplies. A 70,000-strong Mediterranean Expeditionary

Force was assembled, comprising British, Canadian, Indian and French troops, along with the fledgling Australian and New Zealand Corps (ANZAC).



The campaign lasted from February 1915 until January 1916. It began with British and French warships attempting to force their way through the Dardanelles Strait to attack Constantinople (now Istanbul) the capital of the Ottoman Empire. After the naval attack failed, troops were landed on the Gallipoli peninsula. For 8 months fighting raged across the fields around Cape Helles, around the ridges above Anzac Cove, and in the hills around Suvla Bay. Allied soldiers later withdrew from the peninsula, leaving behind their fallen comrades. Almost 36,000 Commonwealth servicemen who died in the campaign are buried or commemorated on Gallipoli

One of the Turkish commanders was Mustafa Kemal who was greatly respected for his heroism during the campaign. After the Great War ended parts of Turkey were occupied by Britain, France and Italy and this drove Turkish nationalism. Mustafa Kemal was elected as the leader of the new Turkish republic recognised by the Treaty of Lausanne in 1923, replacing the Ottoman Empire. After that Mustafa Kemal was known as Ataturk, father of the Turks. He greatly admired European lifestyles and culture and his progressive ideas envisaged a modern secular Turkish state.

in more than 30 cemeteries.

We were there on 12th November, and read this memorial at Anzac Cove.

"Those heroes that shed their blood and lost their lives; you are now lying in the soil of a friendly country. Therefore rest in peace. There is no difference between the *Johnnies and the Mehmets* to us where they lie side by side, here in this country of ours. You, the mothers, who sent their sons from far away countries, wipe away your tears. Your sons are now lying in our bosom and are in peace. After having lost their lives on this land, they have become our sons as well."

The words are those of Kemal Ataturk, the first Turkish President.

I was impressed by the scale of the cemeteries, and the respect exhibited in them, summed up above. The Turkish cemetery has a statue of a Turkish soldier carrying a wounded Australian captain, which was based on a true event. The British cemeteries used stone faced pedestal grave markers instead of headstones to prevent them sinking into the soggy ground. We were there after Remembrance Day, and a Poppy had been stuck into a minute crack on one of the markers.





Graham Farish Gift Packs

Packaged in beautiful retro-style boxes, these N scale packs will make wonderful gifts for seasoned collectors or that special someone.





370-300 Landship Train

Contents:

- Class 4F Midland Railway Black livery No.3848
- Three WD olive green Bogie Bolster wagons
- Three sheeted Mk1 tank loads
- · Certificate of Authenticity

£104.95



Longmoor Military Railway 370-400

Contents:

- WD Austerity Class No.400 'Sir Guy Williams'
- Longmoor Military Railway livery
- Three Mk1 suburban brake end coaches LMR
- blue livery
- · Certificate of Authenticity

£139.95





370-500 **Cumbrian Mountain Express**

Contents:

- Princess Coronation Class No.46229
- 'Duchess of Hamilton' BR Maroon late crest livery
- Three Mk1 blue & grey livery coaches Scenecraft 'Ais Gill' signal box
- Certificate of Authenticity

Stunningly detailed, carefully crafted

Tender history

Thanks to Gary Price, we have uncovered further history of our Fowler tender No. 3918 which we bought from the East Lancashire Railway.

No. 3918 was used by:

'Royal Scot' No. 6122 - November 1927 to December 1931

'Royal Scot' No. 6103 - December 1931 to December 1933

'Royal Scot' No. 6131 - December 1933 to November 1936

'Jubilee' No. 5557 - November 1936 to July 1939

'4F' No 4585 from July 1939 (possibly up to its withdrawal in August 1960). Information then gets a bit sketchy, but the tender may have been removed upon No 44585's withdrawal and then fitted to '4F' No. 44422 (now preserved), which is known to be its last BR engine; this was withdrawn in June 1965.

When 44585 was withdrawn it was based at Toton (16A), whilst 44422 was at Bristol Barrow Road (82E) - so Gary suggests that the exchange may well have taken place at a Works?

44585 was said to be at Derby Works in August 1960 and was scrapped there.

The next locomotive that this tender will work with will be (4)5551 'The Unknown Warrior'.



Tender Plate Donation

The tender plate (shown right) has been donated to the Project by Mrs. Chris Rider in memory of her late husband Julian who was a keen collector of railwayana.

Our heartfelt thanks go to Mrs. Rider.





GAV'S 30th BIRTHDAY 'BASH'

by Andrew Laws (with a few words from the man himself)

Twenty-three LMS-Patriot Project Members booked on 'The Winter Cumbrian Mountain Express' railtour on Saturday 23rd January to celebrate our Events Manager Gavin Shell's 30th Birthday.

The Railway Touring Company had previously informed us that the tour would be hauled by a Class 90 electric from Euston, so we were all pleasantly surprised when heritage Class 86 electric locomotive No. 86259 Les Ross/Peter Pan appeared on the front of our train. The immaculate electric blue liveried locomotive whisked us up the WCML. En route we picked up Gavin (with dad Chris and sister Kirsten) at Crewe taking us north to Carnforth UDGL where No. 46233 'Duchess of Sutherland' was waiting to take the tour over Shap to Carlisle. Poor quality coal resulted in a rather lacklustre performance over the Lakeland Fells and Shap.

Arrival into Carlisle was 15 minutes later than booked after a late departure from Carnforth while the train waited for a Virgin service to pass.

Gavin's dad noted it was 26 years earlier that they had visited Carlisle and bought a Brio trainset for him from the Early Learning Centre. Doesn't time fly?!

We departed Carlisle just after our booked time of 14:25 with the Duchess on the front of our 10 coach train and headed south onto the Settle & Carlisle line. But we soon ground to a halt next to Howe & Co. Sdgs. Signalbox. We were soon informed that there had been a landslide on the northern part of the Settle & Carlisle line and that single line working would be in operation on part of the line north of Appleby. We were delayed by 87 minutes because of this eventually arriving into Appleby 75 minutes late. A quick water stop at Hellifield and better running saw this reduced to 58 minutes by the time we arrived at Farington Junction where the Duchess was replaced by the heritage 86 for a fast run to Euston. Arrival into the capital was only 15 minutes late.

It was great for so many project members and friends to turn out for Gavin's birthday for such an enjoyable day. We also raised £185 for the Project from our collection bucket on the tour and gave out many leaflets to our fellow passengers. Thanks to Kirsten Shell for organising this and along with Sue and Jo for keeping us well fed with cakes and biscuits.









I would just like to say a massive thank you to all the group for making it such a special day. People often say they don't want a good day to end and I can honestly say this was very much one of those days. The No.1 thing I enjoy about being part of the Patriot Project is the social side. I have made a great number of friends since joining and hope to make many more over the coming years. We had 23 members on the train which was a fantastic turnout, I'm just trying to find an excuse for the next grand day out... and maybe get more members and fill a coach! Gavin







SALES REPORT

By Neil Kinsey, Sales Director

Happy New Year to you all from the sales team. We look forward to seeing many of you as we once again get out and about to events in this most pivotal year for the project.

Sales have continued to be good in the last quarter. Obviously with fewer events over the Christmas period we have less opportunity to get out and trade but on line and mail order sales have the front. The backpacks will allow it to be viewed performed well.

I am always looking for more ways in which to expand sales, especially donated items which for various reasons are sometimes difficult to shift.

So with that in mind I have recently taken certain items to a local general auction house where they do not charge us commission as we are a charity. So far the project has benefited to the tune of £290 (on some of which we can claim Gift Aid, see below).

Some items have been sold on ebay which gives us an opportunity to reach a lot of people, so we now trade on a number of fronts, these being events, on-line, mail order, ebay and auction.

Thanks again to those who have donated items in the past and please remember we are always looking for good quality wares to sell, and don't forget that if you are a UK taxpayer we can claim Gift Aid on the cash raised from such sales providing you have signed a Gift Aid form.

Regarding railway books, please refer to my article in the last edition of the Warrior as to which books are saleable and those that are not.

Member Michael Greenwood, a retired graphic artist, has produced a superb oil painting called 'Lady Godiva Steps Out' (see page 45) which he has kindly donated to the project to raise funds towards the build.

This framed painting measures 37"x 25" and is open to offers in excess of £800, please contact the office if you are interested. There's a separate article about Michael in this issue (see page 44).

Finally we have two new items for sale this year. A fine quality backpack sporting our distinctive

logo. I recently realised that although we sell plenty of products bearing 'The Unknown Warrior' name, they tend only to be visible when approached from from behind! If you would like to purchase one please see our sales order page.



Also after being asked on a number of occasions whether we sell raincoats we have decided to offer a branded Portwest 'Sealtex' waterproof three-quarter length jacket; this will be to order only (see advert on page 39).

If you are considering placing an order, please always use the latest published list as some items may have been discontinued from the last issue.

Thank You

PATRIOT MERCHANDISE

Please make your selection from the items on this page and complete the order form overleaf. If you do not want to cut the page out of the magazine photocopies will be accepted.



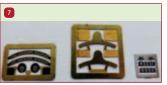














































































The L	MS-Patriot Project – Sales Order Form							
Item No.	Item Description	Size	Quantity	Cost £	P&P £	Total		
1	'The Unknown Warrior' branded 19 litre backpack			23.00	4.00			
2	5551 Baseball Cap -Maroon			8.50	3.50			
3	45551 Baseball Cap -Green			8.50	3.50			
4	5551 Pin Badge			4.50	1.75			
5	45551 Pin Badge			4.50	1.75			
6	Multi Pocket Waistcoat/Gilet (S, M, L, XL, XXL)			27.50	4.50			
7	00 Gauge Nameplate Set			8.50	1.25			
8	The LMS-Patriot Project T-shirt - Maroon			15.00	3.50			
9	The LMS-Patriot Project Line Drawing Mug			6.00	4.50			
10	The Book of the Patriot 4-6-0s - Graham Onley			12.95	3.50			
11a/b	'The Unknown Warrior' Nameplate Badge - LMS Red or BR Green			4.50	1.75			
12	'The Unknown Warrior' Cap - Black			8.50	3.50			
13	'The Unknown Warrior' Cap - Maroon			8.50	3.50			
14	'The Unknown Warrior' Tea Towel			5.00	2.00			
15	'The Unknown Warrior' Logo Mug - Red			6.00	4.50			
16	Jonathan Clay Unknown Warrior Mug - Lined Black			6.00	4.50			
17	Colin Wright Unknown Warrior Mug - BR Green			6.00	4.50			
18	Colin Wright Unknown Warrior Mug - Red			6.00	4.50			
19	Colin Wright Limited Edition Print - BR Green			55.00	4.95			
20a	Colin Wright - A Brush with the Past B2 Print - LMS Red			40.00	5.00			
20b	Colin Wright - A Brush with the Past B3 Print - LMS Red			20.00	5.00			
21	Jonathan Clay - Unknown Warrior in BR Black - A3 Print			20.00	5.00			
22	Royal Signals & Semaphores at Birmingham New Street - Print			8.00	5.00			
23	Unknown Warrior Tie			12.00	1.75			
24a	The UW Polo Shirt - Burgundy (S, M, L, XL, XXL)			17.00	3.50			
24b	The UW Polo Shirt - Black (S, M, L, XL, XXL)			17.00	3.50			
25a	The UW Sweatshirt - Burgundy (S, M, L, XL, XXL)			22.00	4.50			
25b	The UW Sweatshirt - Black (S, M, L, XL, XXL)			22.00	4.50			
26	The UW Fleece - Burgundy (S, M, L, XL, XXL)			30.00	4.50			
27a/b/c	Unknown Warrior Beanie Hat - Maroon, Black or Green			8.50	2.50			
28	Steam Memories - LMS Patriots			9.99	2.50			
29	Claughton & Patriots 4-6-0s Book - G. Toms and R. J. Essery			16.95	2.50			
30a/b	'The Unknown Warrior' Profile Badge - LMS Red or BR Green			4.50	1.75			
31a/b/c	Steam Sounds of the Sixties CD - Volumes 1, 2 or 3			6.00	2.00			
	TOTAL							

Ordered by:

Delivery Address:

Post Code:

E-mail Address:

Telephone number:

Membership number:

Please indicate size required when ordering garments.

Please make cheques payable to: The LMS-Patriot Company Ltd.

Please send to: The LMS-Patriot Company Ltd., The HUB, 17 Eastgate Street, Stafford ST16 2LZ.

THE UNKNOWN WARRIOR WATERPROOF 3/4 LENGTH JACKET



We are pleased to be able offer by order only 'The Unknown Warrior' branded Portwest 'Sealtex' waterproof 3/4 length jacket. These quality coats are 100% waterproof and feature a hood which folds away into the collar, elasticated cuffs, zip and stud fastening and generous pockets.

This is a top quality product and if you would like to place an order please email: sales@lms-patriot.org.uk or phone the office on 01785 244156 stating size required.

Price: £60.00 + £4.50 p&p

Please note that the jacket may take up to 4 weeks to deliver from the order date.

PATRIOT SALES STANDS 2016

Our Sales Stands - a vital part of raising funds and awareness of The LMS-Patriot Project - will be attending the venues, galas and events listed here during 2016.

February 2016

Keighley & Worth Valley Winter Gala

Fri 26/Sat 27/Sun 28

March 2016

Kettering O-Gauge Show Sat 5

Great Central Swapmeet

Severn Valley Spring Gala Fri 18/Sat 19/Sun 20

Bluebell Branch Line Weekend

Fri 19/Sat 20

Sun 13

Great Central Easter Vintage Festival

Fri 25/Sat 26/Sun 27/Mon 28

April 2016

Swanage Spring Gala Fri 8/Sat 9/Sun 10

Keighley & Worth Valley Model Show

Sat 9/Sun 10

May 2016

Harrogate Model Engineering Show, Doncaster Racecourse

Fri 20/Sat 21/Sun 22

Gloucestershire Warwickshire **Festival of Steam**

Fri 28/Sat 29/Sun 30

June 2016

Doncaster O-Gauge Show

Sat 4

Epping Ongar Gala Fri 10/Sat 11/Sun 12

Great Central Model Show

Fri 17/Sat 18/Sun 19

Mid Norfolk Royal Scot Gala Fri 24/Sat 25/Sun 26

Tyseley Open Weekend Sat 25/Sun 26

August 2016 Midland Railex, Butterley Sat 13/Sun 14

Cambrian WW1 Exhibition, Oswestry

Sat 20

September 2016

Telford O-Gauge Show

Sat 3/Sun 4

Thu 22/Fri 23/Sat 24/Sun 25

Somerset & Dorset Gala. **Midsomer Norton** Sat 10/Sun 11

October 2016

Keighley & Worth Valley Autumn Gala

Fri 7/Sat 8/Sun 9

Swanage Autumn Gala Fri 14/Sat 15/Sun 16

Ecclesbourne Model Show Sat 15/Sun 16

Mid Hants Autumn Gala

Bluebell Giants of Steam

Severn Valley Autumn Gala

Fri 21/Sat 22/Sun 23

Fri 28/Sat 29/Sun 30

SOUTHERN AREA VOLUNTEERS WANTED

Calling members who live in the southern area of the country. Do you have time to spare to help out with our sales stand for that part of the country? Robert Wells lives in the Banbury area and runs our second sales operation from there covering an area from the south midlands to the south coast.

We sometimes have trouble staffing events and would be obliged if you could offer your services on the sales stand at selected venues throughout the year.

If you feel you can help please contact Robert who is the volunteer co-ordinator at robert.wells60@gmail.com or by phone on 01295 812568.

If you have any items you would like to donate please contact: Neil Kinsey, Sales Director sales@lms-patriot.org.uk or 01773 832538



MEMBERS' DAY LLANGOLLEN RAILWAY

SATURDAY 25th JUNE, 2016

This year's Members' Day will take place on Saturday 25th June so please make a note of this date in your diary. Following on from previous years, the event will follow a similar format with an optional Fish & Chip Special train to finish the day.

Booking forms are included with this edition of The Warrior.





MEMBERS' CORNER

To the editor of The Warrior:

I attach herewith scans of some photographs taken by my late father, Henry Excell, which may be of interest to the Patriot Project. I have inherited the copyright and I have the negatives, but you are welcome to use them in any way you wish to support the project. I hope these are of some interest although the quality is not brilliant.

The pictures are all believed to have been taken at Willesden in the 1930s and they show (clockwise from top left) Claughton class No. 5964 'Patriot' itself, No. 5932 'Sir Thomas Williams' and an unidentified member of the class which appears to be labelled 'condemned', with another one behind which also seems to have the same label. I also attach his very distant shot of Patriot No. 5545 on the turntable at Camden shed, taken from Primrose Hill station.

Peter Excell - Professor Emeritus, Glyndwr University, Wrexham, Wales, UK.









SEND IN YOUR PATRIOT STORIES AND PICTURES

We are keen to hear from you, our Members, so please send us any experiences, stories and photos connected with Patriots, the railways in World War 1, family members who worked on the railways, etc. that you think may be of interest so that we can publish them in future editions of The Warrior. Please email any material you may have to: memberscorner@lms-patriot.org.uk or post to the Stafford office. Suggestions of how we could improve the magazine are also welcome.

'SOS' - SPONSOR OUR STAYS

FOR DETAILS OF OUR LATEST APPEAL SEE PAGE 11.

DO YOU KNOW WHERE THIS SHOT WAS TAKEN?

No. 45524 'Blackpool' is seen on shed, but which one? The coaling plant is quite distinctive, the loco has later emblem on the tender which dates it after 1957 and the lack of 'electrification flashes' means before 1961. 'Blackpool' was shedded at Upperby from 1955 to 1960 then Warrington until 1961 and after that Edge Hill until withdrawn. The engine has a 12B shed plate - Carlisle Upperby. If you think you know the location please write in.





ERRATUM

In the last issue of The Warrior, we printed a photo of a loco at Hest Bank on the WCML taken by John G. Collins. As several Members have kindly pointed out, the loco was of course a 'Royal Scot' and not a 'Patriot' - on closer inspection the tender is a bit of a giveaway!

However, if any Members do have archive photos of Patriots or recollections of them running in steam days, please do send in your photos and anecdotes. This can be done via the Stafford Admin office address or by email to memberscorner@lms-patriot.org.uk

Lady Godiva Steps Out

by Michael Greenwood

I have been interested in railways for as long as I can remember. My father worked on the LMS and early London Midland Region as a shunter then a guard on goods trains and sometimes local passenger trains. It was a great claim to fame of his that he once drove the famous, well, famous to the residents of Saddleworth anyway, 'Delph Donkey', I suspect this would have been on the return trip whilst it was 'locked in' the single line branch and he was in the driving trailer. He was full of wonderful stories about life on the railway and in his head I don't think he ever left it.

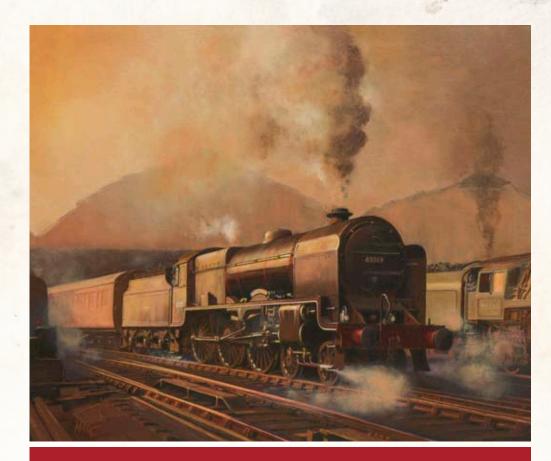
As a young boy my local lines were what we now know as the Calder Valley line and also the Oldham loop line, most of my trainspotting days being spent between Rochdale and Newton Heath. Although trains were plentiful they were also disappointing to us young lads as they weren't glamourous main line expresses so we sometimes saved our pocket money and visited Crewe, Newton-le-Willows, Liverpool and Chester. The sight of Stanier pacifics blasting through Newton-le-Willows on the west coast expresses will always be with me. Of the local trains, the early evening 'double-header', which was the returning Heaton/Redbank newspaper vans, was eagerly awaited. This could turn out to be something mundane like an 8F/Crab combination. Wow, if only I could see that now! On occasion it could be much more exciting - even with exotic eastern promise - the Brit/B1 combination was well received, even if the B1 turned out to be the frequently spotted 'Kudu'. Well known 'namers' in the area were the Ayrshire and Lanarkshire Yeomanry's, Mars, Glorious, Dauntless, Lord Rowallan, and of course the 'Pats' The Derbyshire Yeomanry, Private E. Sykes VC, E. C. Trench, and unnamed 17.

By the time I moved on to higher education at the Oldham School of Art, where I was to meet Eric Bottomley whose tram and train prints you're probably familiar with, the railways were dieselising fast. In fact all local passenger services were already operated by DMUs and main line expresses mostly in the hands of diesel electrics although I guite liked the 'Liners' and 'Peaks'.

Soon after this other aspects of life lured me away from the railways so I missed the end of steam. With hindsight I am not too concerned about this as it looks to have been pretty dismal. Later, whilst working as a commercial artist, I did find time to chase up the remaining industrial steam in the area. The highlight had to be Bickershaw Colliery where double-headed Austerity 0-6-0 saddle tanks hauled heavy coal trains up a steep grade out of the yard and over a hump into the BR exchange sidings amid showers of sparks and cinders. Quite spectacular!

Now retired, I have time to paint again and enjoy portraying local canal and railway scenes, although I do sometimes stray. For example a Ukrainian Railways Electricia (a Soviet Union EMU) and a USA Hudson made quite a change of scene. A Patriot Class just had to be painted, as one of my all time favourite locos. 'Lady Godiva' is depicted in BR lined mixed traffic black because. unlike most Great Westerns. I think the livery suits the 'Pats'; they looked extremely handsome in it. It is the livery I shall be voting for, I know I'm probably in a minority on this, so will be perfectly happy to see (4)5551 in any livery in 2017/18.





'Lady Godiva Steps Out' measures 37" x 25" and is open to offers in excess of £800. Please contact the office on 01785 244156 or email sales@lms-patriot.org.uk if you are interested.

Illustrated talks on the LMS-Patriot New Build Project will take place at the following venues:

Midlands Group of the South Devon Railway

Bentley Heath Community Hall, Widney Road, Solihull B93 9BQ by Kevin West of our Engineering team. The meeting is open to all visitors as well as members. Thursday, 25th February - 20:00 to 22:00

Stephenson Locomotive Society, Bromley Branch

Coney Hill Baptist Church, Coney Hill Road, Coney Hall, West Wickham, Kent BR4 9BU. Non-members are very welcome. Wednesday, 2nd March - 19:30 to 22:00

Pewsey Vale Railway Society

Woodborough Social Club. Smithy Lane. Woodborough, near Pewsey Vale. Wiltshire SN9 5PL. Visitors and non-members are welcome. Tuesday, 10th May, 2016 - 19:45 to 22:00

Purbeck Railway Circle

Harmans Cross Village Hall, Haycrafts Lane, Harmans Cross, Dorset BH19 3EB.

The hall is next to Harmans Cross Station, Swanage Railway. Friday, 8th July, 2016 - 19:30 to 22:00

No. 45548 'LYTHAM ST. ANNES' AT CREWE



Dear Editor.

Member John Royle writing to you from British Columbia, Canada.

I am attaching an old photograph of 45548 that I took on a Brownie 127 camera many years ago. Perhaps one of your wizards of Photoshop can improve this for publication quality.

Details: I photographed Lytham St Annes at Crewe on 14th August, 1952. The time was 5.00pm and I had noted that the 5A based engine was ex-works and acting as station pilot.

I also have another old photo that I took of 45510 at Rhyl, on 10th July, 1953. This was the day of a royal visit to Rhyl (with ex-works 46151, the last Scot to be rebuilt, on the Royal Train). This photo shows 45510 at the up main platform with a train for Euston, showing the special display of flowers for the occasion, displayed between the running lines.

On a personal note, I will never see the completed rebuild of 45551, I am getting too old in the tooth now for international travel. But keep up the good work, I will enjoy the video one day.

Regards John Royle

DON'T FORGET MEMBERS' DAY LLANGOLLEN RAILWAY

SATURDAY 25th JUNE, 2016

Donated items

A big thank you to all Members who have donated items for the Sales Team to sell on the Patriot Stands.

Special thanks go to a Member who donated a superb 2.5" model of a Jubilee, the sale of this together with the Gift Aid from his donation has resulted in £2,250 going towards Project funds. The donation has been used for the machining of the new big end strap for the middle connecting rod.

Thanks also to Barry Hooper for donating his collection of railway books. These were of such good quality that they all sold at the recent Model Engineering show at Alexandra Palace in January.

CAPTION COMPETITION



Company Secretary, Richard
Sant was caught napping (with
the collection bucket) on Gav's
30th Birthday 'Bash'. A Patriot
car sticker goes to the wittiest
caption. Please email your
suggestion to memberscorner@
Ims-patriot.org.uk or post to
the Stafford office.

WORD SEARCH 5 LOCOMOTIVE COMPONENTS

'The Unknown Warrior' is made up of thousands of components. See if you can find some of these in our latest word search. Words maybe written forwards, backwards, down or diagonally:

SMOKEBOX • DRIVING/WHEEL • FIREBOX • CONNECTING/ROD • STAY • RIVET

COUPLING/ROD • NUT • BOLT • GRATE • CHIMNEY • CROSSHEAD • SLIDEBAR • STRETCHER

AXLE/BOX • INJECTOR • EXHAUSTER • CAB • CRANK/PIN • WEB • TENDER • CYLINDER

WHISTLE • BUFFER • SAFETY/VALVE • REGULATOR • DOME • STEAM/PIPE • BOGIE • FRAMES

RUNNING/PLATE • PISTON/ROD • VALVE • CYLINDER/LINER • SUPERHEATER/HEADER

GAUGE • BEARING • LIFEGUARDS • LAMP/BRACKET

Answers for Word Search 4 can be found on page 50.

S	Т	Α	Υ	Α	Н	S	R	Ε	D	N	Ε	Т	Н	0	С	R	0	S	S	Н	Ε	Α	D
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bromboroughpaints.co.uk 0151 334 1237

Supplier of paint for 'The Unknown Warrior'

ANSWERS TO WORD SEARCH 4

LMS CONSTITUENT COMPANIES Y A W L 1 A R D N A L H G I H T A O B R A

BELFAST AND NORTHERN COUNTY(IES) CALEDONIAN • CENTRAL WALES AND CA(R)MARTHEN CHESHIRE LINES • DUNDALK, NEWRY AND GREENCORE EAST(E)RN AND MIDLANDS • FORTH BRIDGE RAIL(WAY) • FURNESS • GLASGOW AND SOUTH WEST **GRAND JUNCTION RAILWAY • HIGHLAND RAILWAY •** LEEK AND MANIFOLD LIGHT RAILWAY • LANCASHIRE AND YORK(SHIRE) • LIVERPOOL AND NORTH WESTERN LONDON, TILBURY AND SOUTHEND • MIDLAND RAILWAY • NORTH STAFFORDSHIRE • MIDLAND+(AND) NORTHERN JOINT RAILWAY • SOMERSET AND DORSET JOINT • CHARNWOOD FOREST • MOLD (+) **DENBIGH • SOLWAY (JUNCT) • BRECHIN AND+EDZEL** WORKINGTON+CLEATOR • SHROPSHIRE/UNION CARLIS(L)E/MARYPORT • ARBROATH/FORFAR WICK/LYBSTER • DEARNE VLY • DERBY • WIRRAL

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The LMS-Patriot Company Limited

Building the new Royal British Legion endorsed National Memorial Engine – 'The Unknown Warrior'

Company Registered in England and Wales No: 6502248

Registered Office:

The HUB, 17 Eastgate Street, Stafford ST16 2LZ.

Registered Charity No: 1123521 VAT Registration No: 978 8801 48

Account Details for Direct Donations: CAF Bank Ltd., Account no: 00092990

Sort Code: 40-52-40

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