

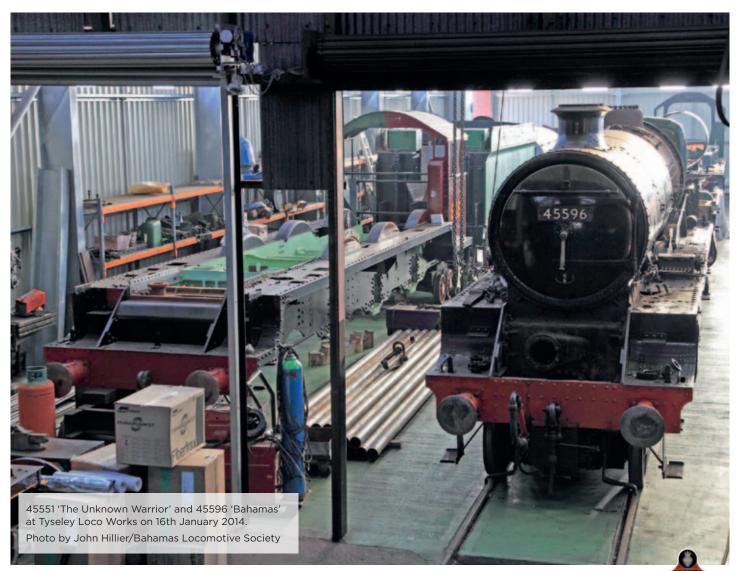


The Warrior THE NEWSLETTER FROM THE LMS-PATRIOT PROJECT

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Tyseley visit for 'The Unknown Warrior' as 'Jube' meets 'Pat' for the first time since 1963

The sight of a 'Pat' and a 'Jube' was seen in January as the two locomotives met in the new purpose-built workshops at Tyseley Loco Works. This is something that has not been seen since the early 1960s. 'The Unknown Warrior' was taken to Tyseley directly after the Warley National Model Railway Exhibition on 25th November to have its axle boxes fitted, as temporary wooden ones had been used at Llangollen to enable the driving wheels to be fitted for the National Memorial Arboretum and Warley visits. While 'Bahamas' has been taken to Tyseley for a major general overhaul, arriving on the evening of the 27th November 2013.





Engineering Update

by David Bradshaw & Kevin West

Work has continued at a less frantic rate than hitherto as we catch our breath and pay our bills for the work undertaken by Llangollen Railway Engineering in the last quarter of 2013. Progress in the early part of 2014 following the move of 'The Unknown Warrior' to Tyseley Locomotive Works after the Warley exhibition involves the final machining of the axle boxes and fitting them to the frames.

A breakdown on the horn grinding rig has added more time to the task than originally planned, but this work is now expected to be complete by mid-March. Once the grinding is complete the frame assembly will be measured to give exact axle centres and the offsets established to finally machine the axle boxes to fit. The lead for the balance weights is on order, about ³/₄ ton of it! The weights are being filled using Tyseley's 'Jubilee' 5593 'Kolhapur' as a guide, as we do not have full information for a 'Patriot' and all the rotation machinery on a 'Jubilee' is the same as the 'Patriot'.



Horn guide grinding is being undertaken at Tyseley Loco Works.

Inside Cylinder Castings

The new inside cylinder casting was moved from the Coupe foundry in Preston to Harco Engineering, Brierley Hill in mid-January. Machining is now complete and the casting will be moved to Llangollen around the end of March for fitting into the frame assembly.

Motion

Also being machined at Harco, are the outside motion brackets. The motion bracket castings are due to be finished and will move to Llangollen with the cylinder casting. The motion girder patterns have been made and the order placed for the castings.

Outside Cylinder Casting

The CAD model for the outside cylinders was completed in early February and delivered to the pattern makers. Work to make these is expected to be completed in early



Polystyrene pattern for motion girder. Photo: Kevin West

March. One will be sent to the foundry for the first casting (expected to be mid-April) to be made, the second pattern staying at the pattern makers until we are satisfied no modifications are required following the first casting. Quotations for their machining will be sought over the next few weeks.

Photos: Bob Sweet

Bogie

Work continues on several fronts on the components for the bogie. At Boro Foundry, Lye, machining of the bogie centre casting is underway. The bogie centre slide casting is due to be machined in March. These are the final castings to be machined for the bogie assembly. We expect all the parts being moved to Tyseley around the beginning of April, with Tyseley making a start on assembling the bogie in the second half of the year.

Boiler

A design review meeting was held at LNWR Crewe in late February. As well as the Project Engineering team, a representative of our boiler insurers and LNWR staff who will build the boiler were present. We have a full set of drawings for the G91/2S boiler as used on the Patriots and a full review



Bogie Centre Casting.

Photo: Kevin West

was under taken to ensure the design conforms to today's standards and requirements. Apart from some minor changes to internal fittings they found the design acceptable. The insurer commented that the design was over engineered for the original working pressure of 200psi and will easily pass at 225psi. He suggested we could build and test to the higher pressure as this will give greater safety margin and also provide the opportunity to run the loco at a higher pressure at some time in the future if we decide to, although at the moment our intention is to run at the original 200psi. Forming of the inner firebox flange plate is due to start in the next month with the complete firebox expected to be complete by the end of the year.



Outside cylinder CAD drawing by Kevin West

Engineering Update (continued)

Tender

Thoughts on the design changes required for the new tender tank continue. Discussions with other loco groups particularly those running on the main lines are ongoing to come up with the most suitable design possible. The tender will look like a Fowler 3.500 gallon unit, but internally changes to increase water and reduce coal capacity will be made. We also need to accommodate various electronics boxes for the new signalling systems. A firing iron tunnel will be added in the coal space as it is not practical to use the original rack over the top of the coal space, especially under the electric overhead wires!

On the chassis and parts recovered from the two tenders we own, a full cataloguing of parts has been made and a start on cleaning and painting these will start next month by a volunteer party. We have a certain number of surplus parts that another group have expressed interest in. We have selected the best parts for our tender.

Future programme

- Complete outstanding motion drawings
- Complete brake gear drawings
- Complete sanding gear drawings
- Complete reversing gear drawings
- Complete lubrication drawings

Consultancy

The Project has been contacted by several loco groups over the last few months regarding our use of new technologies and processes. The first example of this is for a pair of outside cylinders for a preserved locomotive on a heritage line in Scotland. This work is being undertaken by the project's design engineer, Kevin West, as a separate contract, but due to the distance from the loco location and the engineers and suppliers being used (the same as those producing our outside cylinders), Kevin will be project managing the production and delivery in return for a donation to the Project. The LMS-Patriot Project welcomes talks with any owners/loco groups to share our knowledge and experience of building 'The Unknown Warrior'.

Members' Day 2014

The fourth LMS-Patriot Project Members' Day will take place at the Llangollen Railway on Saturday 19th July. Invitations and booking forms will be posted out to you shortly. The format will follow a similar itinerary to last year, but with several improvements after the feedback we received from you our Members. A private train will be used again with lunch served aboard, and escorted tours of the Llangollen works to see the latest progress of 'The Unknown Warrior'. There may even be a chance to travel on the new section to Corwen (subject to Llangollen Railway agreement) which is due to re-open on 1st June. Places are limited to 250, and will be offered on a firstcome first-served basis. An evening Fish 'n' Chip special will also be run - 'The Patriot Plaice'. Details of this will also be posted to you.

Fundraising Update

The Cylinder Appeal has raised over £20,000 which has enabled all of the cylinders to be ordered for 'The Unknown Warrior'. As already reported, the middle cylinder has been completed and the outside cylinders are on order. A breakdown of the cost of these is as follows:

Inside cylinder pattern	£2,280
Inside cylinder casting	£5,170
Inside cylinder machining	£3,600

Outside cylinder pattern Outside cylinder casting Outside cylinder machining £1,700 (each) £2,366 (each) £ (not yet quoted)

The Boiler Appeal Loan Scheme has so far raised around £160,000 and £40,000 has been generously loaned by a Member which has allowed the Project to purchase all the copper sheets for the firebox. If you are interested in joining The Boiler Loan Scheme, please contact us for an application form and prospectus. The Boiler Loan Scheme pays a very attractive fixed rate 2.5% compound interest rate.

We will shortly be sending an Appeal letter to you as we enter an important phase of the Project. 2017 is rapidly approaching and we need to keep up the excellent rate of progress on your engine, 'The Unknown Warrior'.

People's History Museum – Exhibition Launch, Manchester, 3rd May

A new Exhibition called 'Rails and Remembrance' which the Project has jointly organised with The People's History Museum in Manchester, thanks to Heritage Lottery Funding, is due to open on Saturday 3rd May, 2014. All Members are invited to attend the People's History Museum on the launch day, which is free to enter, between 10am and 5pm. Hospitality will be provided on the day. For more info about the People's History Museum: **www.phm.org.uk**



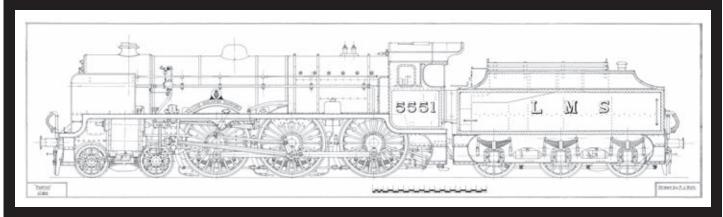


Peter Rich

We regret to report the death of Pete Rich in hospital in Newport, South Wales after a long period of ill health. Whilst greatly restricting his mobility, this did nothing to dim his enthusiasm for steam in general and the Great Western Railway in particular of which he had encyclopaedic knowledge. An engineer by training, a police dog handler by profession, a draughtsman and a model maker of the highest quality by inclination, Pete was just as much at home in the world of full size steam as he was in the smaller world of the model. He was a very popular and friendly individual, always willing to give advice and guidance to anyone who needed it.

It was Pete who in the early 1970s suggested to the GWS that it might be possible to harvest parts from ex-GWR locos at Barry to construct lost designs of locomotive. From this suggestion emerged the Saint 4-6-0, the County 4-6-0 the Grange 4-6-0 the 4700 2-8-0, the Patriot and a host of others. Pete was responsible for most of the drawings for the Saint, the frame drawings for the County and the frame drawings for 'The Unknown Warrior'. Without his assistance in those early days we would not have been able to get the project underway in the way that we did. We are deeply grateful to Pete for his contribution to the project and would like to send our deepest sympathy to his wife Maureen (Mo) and daughter Helen.

David Bradshaw



Pete Rich was a superb draughtsman and donated this highly detailed line drawing of 'The Unknown Warrior' to the Project.

Volunteering – a vision for the future

by Jordan Leeds, Volunteer Co-ordinator

In the heritage industry the humble volunteer is the lifeblood of many schemes and without these hardy individuals who work often tirelessly and in the face of adversity we would not be where we are today, and there would be no railways to take 'The Unknown Warrior' on visits and no historic buildings open to the public.

So far we have raised money by way of donations and through our sales stand with volunteers successfully managing the project and long may this continue. However, we are slowly coming to a turning point in the project where skills need to be learnt and experience gained, so perhaps see this as a rallying call for new volunteers. You may not have a mechanical engineering degree or perhaps be a business development consultant but we need you to help support the Administration, Engineering & Sales teams with your efforts. It would be brilliant if in 2018 we could turn out a locomotive with a full complement of staff to operate a seamless production and all roles supporting each other so closely. So why not give me a call on 07773 185342 or drop me an email at volunteer@Ims-patriot.org.uk

Everybody can bring something to the Project and you never know you may learn something too!



All in the name – Patriot Nameplates

by Andrew Laws





Original 'Patriot' nameplates loaned for the Warley Exhibition at the NEC, November 2013.

> Photos: Tim Easter (above) and Andrew Laws (left).









At the Warley National Model Railway Exhibition last November the Project was lucky enough to display some original 'Patriot' namepletes which were kindly loaned by private collectors.

It is thought that all of the 82 'Patriot' nameplates (from both sides of loco) survived, and at least 24 names (and six names from the other side) are owned by museums, regimental museums or local authorities. Many of these are on public display. I've compiled a list as follows, with the help of LMS-Patriot Project Member and Railwayana Collector, David Hughes.

Patriot Name	Location	
Patriot	Colas Depot, Rugby (no public access)	
St Dunstan's*	Blind Veterans UK, London	
The Leicestershire Regiment	Royal Leicestershire Regiment Museum, Leicester	
Royal Signals	The Royals Signals Museum, Blandford Forum	
The Royal Pioneer Corps**	The Royal Pioneer Corps Association, Bicester	
The Royal Army Ordnance Corps	The Royal Logistic Corps Museum, Deepcut	
Royal Tank Corps**	The Tank Museum, Bovington	
The Derbyshire Yeomanry**	Erewash Museum & Gardens, Ilkeston Derby Museum & Art Gallery, Derby	
Holyhead*	Public Library, Holyhead Town Hall, Holyhead	
The Bedfordshire and Hertfordshire Regiment	Wardown Park Museum, Luton	
Lady Godiva*	Museum of Road Transport, Coventry	
Llandudno***	Tourist Office, Llandudno	
Rhyl	Town Hall, Rhyl	
Prestatyn	NRM, York	
Colwyn Bay	Civic Centre, Colwyn Bay	
Morecambe and Heysham	NRM, York	
R.E.M.E.	REME Museum, Arborfield	
Stephenson	NRM, Shildon	
Private W. Wood V.C.	Alnwick Castle	
Private E. Sykes V.C.	Alnwick Castle	
E. C. Trench	Doncaster Grammar School Museum, Doncaster	
Home Guard	NRM, York	
Duke of Sutherland	NRM, York	
The Royal Leicestershire Regiment ⁺	NRM, York	

*(both plates) **(both plates plus crests) ***(plus crest) *(nameplate only)







'The Unknown Warrior' – A Brush with the Past by Colin Wright

Railway artist and Member Colin Wright has painted this superb new painting depicting LMS 'Patriot' No. 5551 at Crewe in 1934 along with 'Claughton' No. 1914 'Patriot' and the last 'Jumbo' No. 25001 Snowdon. The painting was commissioned by LMS-Patriot Project Director, John Hastings Thomson who has kindly allowed prints of the painting to be made available for sale. The proceeds of which will help build 'The Unknown Warrior'.

A large print measures 560mm x 700mm (22"x27½") Cost £40.00 + £5.00 p&p.

A medium print measures 353mm x 500mm (13.9"x19.7") Cost £20.00 + £5.00 p&p.



'The Unknown Warrior' by Jonathan Clay

The Project also commissioned a fine watercolour study of 45551 in early BR Black livery from transport artist Jonathan Clay. The superb print is A3 size and costs $\pm 20.00 + \pm 5.00$ p&p.

These prints together with our Limited Edition Print of 'The Unknown Warrior' at Llangollen are available from our web shop: www.lms-patriot.org.uk/catalogue/ prints or you can order them using the attached sales order form.



Old mobile phones and ink jet cartridges wanted

If you have an old mobile phone, or are about to upgrade to a new phone, please consider donating your unwanted phone to the Project. We can sell these to raise funds for 'The Unknown Warrior'.

Also please continue to donate your old inkjet cartridges. Please bring them to our sales stand, to Members' Day or to our next AGM. Or if you have a large number of ink jet cartridges, please contact us and we will post you a Freepost recycling envelope. We can recycle HP, Dell, Lexmark, Canon, Samsung, Neopost or Brother ink jet cartridges, but please don't send Epson or Kodak cartridges as we can't reuse these.

Trading company set up

Looking ahead to the future and the running of 'The Unknown Warrior', the Board has set up a trading company – known as Patriot Enterprises Ltd. While the 'ownership' of 'The Unknown Warrior' remains with the charity – The LMS-Patriot Company Ltd. It is good business practice to separate commercial activity from the charity. With this in mind a new trading company is being formed. More details will be available soon.



Bachmann OO Scale Models of 'The Unknown Warrior'

by John Hastings-Thomson

Bachmann have kindly agreed to produce models of 'The Unknown Warrior' in LMS crimson lake livery as 5551 and BR express passenger green livery as 45551. Pre-production samples of these models were displayed at the Warley National Model Railway Exhibition last November.

The Model will be launched in March 2018 to coincide with the expected completion of "The Unknown Warrior." Initially it will only be available through The LMS Patriot Project and all profits will go towards launching the engine into traffic on the mainline and heritage railways. When the model goes on general release, Bachmann will make a contribution to the Project for each model sold through the trade.

The livery that "The Unknown Warrior," will be run in initially, will be decided by a ballot of the Project's Membership in 2016 and the livery of the initial model will reflect this choice. The illustrations shown are not a firm guide to livery or specification. Obviously those people wishing to influence the livery choice should become members of the Project!

At this stage it is difficult to give an accurate price for the model. The current RRP for the standard Bachmann model is £130. Prices are currently increasing by 5%+ per annum.

At this stage we are asking for expressions of interest in the model (no commitment to buy). We are not asking for deposits or card details.

If you are interested in purchasing a model through the Project in March 2018 please send your name, telephone number and email address to: LMS-PATRIOT CO. LTD., PO Box 3118, Hixon, Stafford, ST16 9JL or email: info@lms-patriot.org.uk

All people who express interest in the model will receive email updates as more information becomes available. Once we have firm details of livery and price, we will ask for firm orders and card details.

Thank you for your interest and we hope that you will support the Project through the purchase of this model direct.



Donated items wanted

A large proportion of the income from our sales stand comes from donated items. We are therefore appealing again for the donation of your unwanted model railway items (any gauge wanted), railwayana, DVDs and railway books. Please note that railway magazines can be donated to your local heritage railway, as they are too heavy and bulky for the Project to sell and store. If you have any items you want to donate please contact: Neil Kinsey, Sales Director sales@lms-patriot.org.uk or phone 01773 832538.

A big thank you to all of our Members who have recently donated items. The proceeds from all items will help build your engine – 'The Unknown Warrior'.

Articles for 'The Warrior'

Andrew Laws, Editor

Thank you to Members who have sent in letters, photos and articles for the Warrior. Please note that I can't always reply to every letter because of the pressures of time, but each letter is read and your feedback and correspondence is much appreciated. I am also gradually scanning all photos received and will put these on the new website in the new 'Gallery' section when time permits.

Please continue to send Patriot articles, photos and recollections for possible inclusion in 'The Warrior'.



The LMS-Patriot Company Limited

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

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Newsletter

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