THE MIKADO MESSENGER



Welcome to edition No. 16 of *The Mikado Messenger*. Please accept our apologies for the late arrival of this issue. We have been experiencing some technical difficulties that have led to delays in the distribution of *The Tornado Telegraph* and *The Mikado Messenger*. These problems have now been resolved and normal service will resume for 2016.

The Messenger aims to provide a monthly bulletin of news about the construction of No. 2007 *Prince of Wales*. Stunning progress continues to be made and since the last Messenger the smokebox door has been pressed at the South Devon Railway and a laser cut 'kit of parts' produced for the cab. Fundraising forges ahead with the dedicated donations scheme yielding many sponsored components - watch this space for the 'DD' Christmas special!

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Editor of The Mikado Messenger



North View Engineering Solutions at Darlington have completed machining of the front boiler support and the pony truck top centre castings. Steve Wood has completed machining the buffer casings which are trial fitted to the front buffer beam. He has since turned the engine draw bar pin.







SMOKEBOX

The plate work for the smoke box has been ordered. Timsons Engineering at Kettering have started manufacturing the smoke box door frame - a complex shape being made by CNC machining from a piece of 90mm thick boiler plate.

The most significant item to have been manufactured recently is the smoke box door. *Tornado's* smoke box door started life as a spun tank end which gave the dished shape. The sharper radius on the outside edge of the door was achieved by hand forging over a former. The "D" shaped smoke box door on the original P2 design does not lend itself to this method, although it would be technically possible to achieve it by cutting, black smithing and welding the round door, however with the smoke box door being both a prominent and iconic part of the P2 design, there was doubt that a satisfactory finish could be achieved by this method.

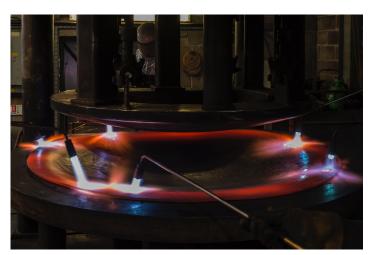
Other methods considered including CNC machining the door out of solid 8" thick plate, however this was significantly more expensive that the method actually used. Having seen the quality and surface finish that South Devon Railway Engineering (SDR) was achieving with firebox back heads, throat plates and tube plates, they were asked to quote for making the smoke box door. After some discussion an acceptable quotation was received and male and female press tools made using the 3D CAD model.

Following a trial pressing in mild steel, the definitive smoke box door was pressed from Cor-Ten steel - the corrosion resistant steel used on unpainted metal bridges and sculptures such as the Angel of the North. For the first stage of pressing the plate was clamped flat over the female press tool and the domed male press tool pushed downward to dish the plate. The plate is then unclamped and re-heated and the flange round the edge of the door formed by pushing the male tool right through the female tool. The wavy edge is then cut off to leave an accurately shaped pressing. Sarah Anne Harvey's photos show the process:









CAB

The major visible progress has been the delivery of the cab kit comprising laser profiles plates, rolled or pressed into curves where necessary.



CASTING AND MACHINING

The first of the non-ferrous fitting castings have arrived at DLW, being injector valve bodies and handwheels and Cartazzi top wedges. Quotations have been received for the machining of all the engine axle and cannon boxes with their roller bearing spacers and thrust rings. An order for this work will be placed shortly.





FUNDRAISING

Public interest in seeing a new Gresley class P2 'Mikado' become a reality sooner rather than later is high and over 700 people have already signed up to the 'P2 for the price of a pint of beer per week' (£10 per month or more) covenant scheme since its launch in 2014. In addition to this core scheme, funds have been raised through The Founders Club (370 people have donated £1,000 each - target 100 people, now closed), The Boiler Club (95 people have pledged £2,000 each - target of 300 people) and Dedicated Donations (over £160,000 from existing supporters sponsoring a variety of components). The Gresley Society Trust has also generously sponsored the locomotive's distinctive front-end. This means that the project has already received pledges of over £2m (including Gift Aid) of the £5m needed over the next seven years.

This means that the regular monthly "P2 for the price of a pint" income for the P2 Project is already running at 90% of that of *Tornado*, with only 22% of *Tornado's* Covenantors also regular donors to *Prince of Wales*.

We are confident that we will have completed the rolling chassis for No. 2007 *Prince of Wales* next summer and we remain on-track for completion of the new locomotive in 2021. However, to maintain this rate of progress we need to continue to raise in excess of £700,000 per year, which given the nature of the regular donation scheme becomes more challenging as each year passes.

For details of how to help visit www.p2steam.com, email enquiries@p2steam.com or call 01325 460163.

THE BOILER CLUB

It is our desire to leave No. 2007 *Prince of Wales* debt free upon completion and therefore our aim is to raise at least £600,000 for The Boiler Club from

300 supporters each donating £2,000 to the project (in up to 40 payments of £50 by standing order).

Special benefits for members of The Boiler Club:

- Opportunity to buy a ticket (seat already reserved) on No. 2007's first main line train
- Reasonable access to No. 2007 at all times
- Opportunity to buy exclusive Boiler Club badge
- Opportunity to join one of the teams building No. 2007
- First choice of other components to sponsor
- Special limited edition version (signed/numbered) of the first official painting of No. 2007 *Prince of Wales* with No. 60163 *Tornado*
- Special Boiler Club day with *Tornado*

For more information on how you can help to build Britain's most powerful steam locomotive <u>visit our website</u>, <u>email us</u> or call 01325 460163.

PRESENTATIONS

If any railway society - or indeed other interested group - would like a presentation on the project the <u>please get in touch</u>.

VOLUNTEER

As ever we are looking for more volunteers. It takes a lot of people to both keep *Tornado* on the main line and also to build *Prince of Wales*. There is always so much more that we can achieve with the right volunteers with the right skills and can-do attitude. Please email enquiries@p2steam.com if you think you can help.



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