THE MIKADO MESSENGER



Welcome to edition No. 56 of *The Mikado Messenger*. The *Messenger* aims to provide a regular bulletin of news about the construction of No. 2007 *Prince of Wales*.

HEIR AND A SPARE: BOILER ORDER ANNOUNCEMENT

The A1 Steam Locomotive Trust have placed a million-pound order for two new boilers for steam locomotives *Prince of Wales* and *Tornado*.

We are delighted to announce that we have placed a £1m order with Dampflokwerk Meiningen (Steam Locomotive Works Meiningen), a workshop of the Deutsche Bahn (the German Federal Railway) for two new Diagram 118a boilers for its two new steam locomotives. The order is to supply the boiler for new Gresley class P2 No. 2007 *Prince of Wales* and a 'spare' boiler for use on both No. 2007 and No. 60163 *Tornado*. This order will enable the Trust to rotate the three identical boilers over its two locomotives, with two operational boilers and one 'spare' undergoing overhaul at any one time. DB Meiningen delivered *Tornado's* original boiler in July 2006.

This strategic move by the Trust will reduce the time out of traffic for each locomotive by around four months, increase the potential revenue earned by both locomotive during each operational cycle and reduce the cost of their overhauls. By ordering both boilers at once and leveraging the purchasing power of the supporters of both locomotives, we have saved a six-figure sum that would have otherwise been required if the two boilers had been procured separately. The first new boiler - to be fitted to No. 60163 *Tornado* during its next overhaul - will be delivered in September 2020 with the second - to be fitted to No. 2007 *Prince of Wales*- scheduled to be delivered in July 2021.

We ran a competitive tender process for the procurement of the two new boilers. The Trust contacted eight companies from across the UK, Europe and the USA. Some of the potential suppliers excluded themselves due to the size and scale of the project to provide just one diagram 118a boiler. Others were not taken forward by the Trust based upon considerations which included their capability, capacity, track record, cost and ability to deliver on schedule. The shortlisted companies were then invited to cost the project before submitting best-and-final-offers.

The Trust is using a variety of funding methods to support the procurement of the two new boilers in line with its policy of hypothecating the funding of each locomotive in place of the Bearer Bond which was used to fund the 2006 purchase of *Tornado's* original boiler from DB Meiningen. The funding of the boiler for new Gresley class P2 No. 2007 *Prince of Wales* and its contribution to the 'spare' boiler is coming from The Boiler Club which was launched in October 2016 to raise £600,000 plus Gift Aid from 300 supporters each donating £2,000 in up to 40 payments - so far over 175 supporters have subscribed to The Boiler Club pledging around £440,000 including Gift Aid. The funding of Peppercorn class A1 No. 60163 *Tornado's* contribution to the 'spare' boiler will come from extending its 'I
• 60163' fundraising campaign - 100 supporters donating £601.63 in up to six payments - beyond the 100-supporter target. Additional funding for the 'spare' boiler will also come from recent legacies to the Trust.

We urge those not yet on-board to join us as covenantors to both locomotives, a member of The Boiler Club and for *Prince of Wales* and a subscriber to the 'I ♥ 60163' campaign for *Tornado*.

NEWS BRIEFS

Cab seat cubicles - The trial fitting of the cab seats cubicles has been taking place at DLW. These cab cubicles, including seat, are removable as an unit. They are of a similar design already proven on *Tornado*. The gutter with rubber seal, which also supports the seat around the edge of the cab, prevents any water entering the cubicle from the top. There is a locating doubling strip at the base, which also act as a seal. The hinge supporting the precisely cut door will be welded on after the sandblasting process.

Cab seat cubicles - Ian Matthews/ A1SLT

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Cab seat cubicles - Ian Matthews/ A1SLT





Vacuum pipe - The first components to support the vacuum pipe in the frames have been fabricated by Ian. The next stage of the process is to use a pipe bender to produce various segment of the pipe system. Many sections of the pipe have been threaded and bent to shape and our newly acquired pipe threading machine will be used extensively during this process.



Vacuum pipe brackets - Ian Matthews / A1SLT

Wheel sets - Ian Matthews has been working on ensuring the leading wheelset tyres faces are gleaming with a mirror-like finish, as there was on the original P2 No. 2001 Cock of the North.



Leading wheelset - Ian Matthews / A1SLT

SUMMER DRAW 2019

We drew the Summer Draw 2019 raffle on Friday 7^{th} June and are pleased to announce the following winners:

 1^{st} Prize - Table for two in First Class Dining on a Tornado railtour

Winner: Mr N Wright

Winner: Mr G Jones

3rd Prize - 2 x Standard Class Tickets on a *Tornado* railtour

Winner: Mr G Sutton

5 x Prizes - 'Tornado 10 Years in Steam' poster

Winners: Mr D Hallett, Mr P Walpole, Mr K Franklin, Mr J Cooper, Mr P Walker

5 x Prizes - 'A Giant Resurrected' poster

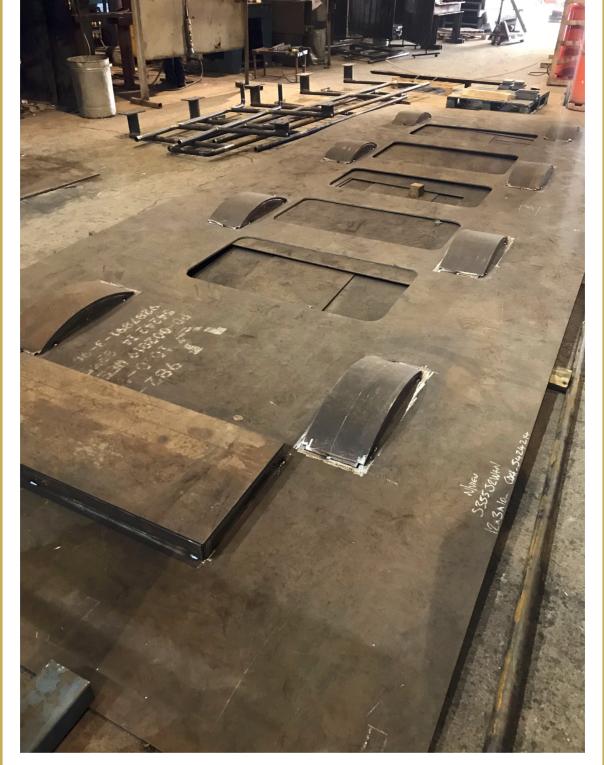
Winners: Mr R Clarkson, Mr A Keen, Mr P Young, Mr Simpson, Mrs Walton

Thank you to all who bought tickets. We raised over £3,600 which will be used for maintaining *Tornado*.

SAVE THE DATE

Our Annual Convention is on Saturday 12th October 2019 and will be held at the Mercure Darlington Kings Hotel for both the morning presentations and the evening dinner. Supporters will also have the opportunity to visit Darlington Locomotive Works to see the progress of No. 2007 *Prince of Wales*, with David Elliott conducting a guided tour. We will be sending out invitations, with the full details, next month.

THE TENDER CLUB



The tender tank base plate at North View Engineering Solutions Ltd - A1SLT

The tender tank base plate is going through the welding process and will soon be ready to be sent to I D Howitt Ltd for trial fitting to the tender frames. In order for us to maintain this progress we would encourage you to join The Tender Club - 'Let's get a Tender behind' *Prince of Wales*.

More information about The Tender Club can be found here.

PROGRESS TO DATE

- Engine's frames erected; all major engine frame stays, brackets, horn blocks, axle boxes and buffers cast; around 1,000 driven bolts fitted to the frames
- All engine wheelsets complete; materials for tender wheelsets delivered
- Boiler design study completed, and forged foundation ring corners manufactured and machined; start made on boiler fittings with castings for combined injector steam and delivery valves;

- regulator castings delivered; superheater header cast and machined; boiler cladding manufactured and trial fitted to frames;
- Boiler order placed with Dampflokwerk Meiningen (Steam Locomotive Works Meiningen), a
 workshop of the Deutsche Bahn (the German Federal Railway). The order is to supply the boiler
 for new Gresley class P2 No. 2007 Prince of Wales and a 'spare' boiler for use on both No. 2007
 and No. 60163 Tornado. This order will enable the Trust to rotate the three identical Diagram
 118a boilers over its two locomotives, with two operational boilers and one 'spare' undergoing
 overhaul at any one time.
- Study into ride and suspension completed using rail industry standard Vampire® software; finite Element Analysis completed on re designed crank axle to ensure locomotive complies with modern standards
- Cab erected and cab side and spectacle window frames fitted; engine footplating and splasher kits delivered and permanently fitted to frames
- Smokebox assembled and fitted to the frames; chimney cast and fitted
- Tender tank and frames construction under way, axlebox and other tender castings ordered from William Cook Cast Products
- Tender Tank ordered
- Nameplates and chime whistle delivered
- Significant progress on design and manufacture of pipework and electrical system
- Over £2m spent, £2.6m raised and £3.3m pledged of the required £5m.



Progress on No. 2007 Prince of Wales - Mandy Grant / A1SLT

FUNDRAISING

'P2 FOR THE PRICE OF A PINT OF BEER A WEEK' - Nearly 920 supporters have signed up as monthly Covenantors for No. 2007 *Prince of Wales*. We aim to reach 1,000 regular donors by the end of the summer. If you haven't yet signed up to our monthly donation scheme we would encourage you to get on board - you can find more information here.

THE MOTION CLUB - The Motion Club has now welcomed 138 members, with only 37 members remaining of our 175 member target. You can find more information about The Motion Club here - help us to fund the manufacture of No. 2007's motion!

THE BOILER CLUB - The Boiler Club is now approaching the 180 member mark, leaving just over 120 spaces available. As we have now placed our order for the boiler, we would urge those who haven't yet contributed towards the purchase of No. 2007 *Prince of Wales'* boiler to join us. This is the single most

expensive component on the locomotive, meaning it is vital to increase the donations towards the boiler so we can place the order with confidence. More information about The Boiler Club can be found here.

THE TENDER CLUB - Our newly launched club, The Tender Club, is starting to fill up with 25 places already filled. In order to keep on schedule to complete No. 2007 by 2021 we need to have the tender frames and tender tank delivered to Darlington Locomotive Works in 2019. I.D. Howitt Limited is currently manufacturing the tender frames and is making good progress. Given the generosity of our supporters, we have confidently placed the order for the manufacture of the tender tank with North View Engineering Solutions. Our target for The Tender Club is 250 members, contributing £1,500, so if you would love to contribute towards the tender more information about The Tender Club can be found here.

DEDICATED DONATIONS - You can sponsor components on No. 2007 *Prince of Wales* from as little as £25.00 ranging up to £15,000! This scheme has already raised around £345,000. If you would like to sponsor a component, please email dedicated.donations@p2steam.com, detailing the amount you would like to donate and/or if you had a specific part of the engine in mind, we will then send you some component recommendations to suit your donation.

For more information on how you can help to build Britain's most powerful steam locomotive visit www.p2steam.com, email enquiries@p2steam.com or call 01325 460163.

AN AUDIENCE WITH THE PRINCE OF WALES

Following on from the success of our 2018 Roadshow programme, we will be continuing the Roadshows in 2019. We will be holding a series of presentations on the project to build new Gresley class P2 No. 2007 *Prince of Wales*. Each presentation will feature key team members including Mark Allatt and/or David Elliott and will cover the background to the project, progress to-date, future plans and details of how to get involved. We would encourage you to attend one of these Roadshows and bring along some friends and family members who would be interested in hearing about the project. The two hour presentation will start promptly at 11:00hrs and run until 13:00hrs on each of the days listed below and are open to existing supporters and interested members of the public:

NEW 2019 ROADSHOW PROGRAMME:

- Saturday 6th July 2019 Darlington Locomotive Works, Darlington
- Saturday 14th September 2019 Hilton Hotel, Leeds
- Saturday 2nd November 2019 Darlington Locomotive Works, Darlington
- Saturday 7th December 2019 Pendulum Hotel (Manchester Conference Centre), Manchester.

For more information on the P2 Roadshows visit www.p2steam.com, email enquiries@p2steam.com or call 01325 460163.

OPEN DAYS AT DARLINGTON

We hold public open days at Darlington Locomotive Works on the first and third Saturday of every month from 11:00hrs to 16:00hrs. Our next Open Days are 6^{th} and 20^{th} July. Come and see the progress of No. 2007 *Prince of Wales*.

PRESENTATIONS

If any railway society - or indeed other interested groups - would like a presentation on the project they can contact us by emailing $\underline{enquiries@p2steam.com}$

EASYFUNDRAISING

Why not help the Trust at the same time by doing your online searches through EasyFundRaising: painlessly raising cash for The A1 Steam Locomotive Trust every time you spend online? You can find details of how to do this here.

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. We are currently looking for more volunteers to join the Open Days team at Darlington Locomotive Works. If you have a passion for raising money or engineering please do get in contact. For more information, please <a href="mailto:emailto

TRAVEL WITH TORNADO

We started to take bookings 'in house' on Wednesday 19th June. Over the past few months our website and in house systems have been upgraded to enable railtour bookings to be processed and administered from Darlington. Siobhan Osborne has joined our full time team at Darlington to lead in this area and provide a great service to our passengers.

There are no major changes to the public side of our website, and for those who prefer to book by phone it's easy to call 01325 488215

For more information on *Tornado's* tours and where you can see her, click here.

The Trust respectfully requests that anyone wanting to see *Tornado* follows the rules of the railway and only goes where permitted.









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