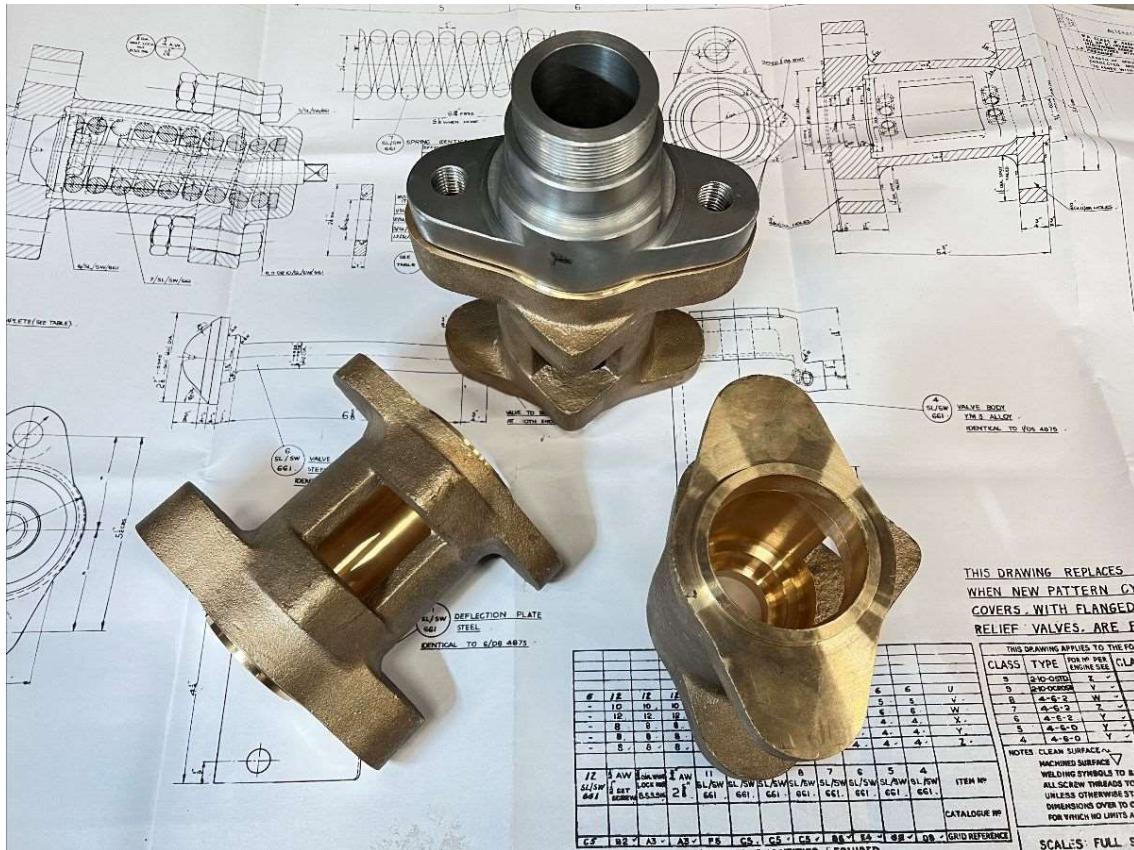


THE MIKADO MESSENGER



2007 PRINCE OF WALES



Welcome to the 94th edition of *The Mikado Messenger*, bringing you the latest update from No. 2007 *Prince of Wales*. This month's edition provides a video link for an in depth walk-and-talk around the Monobloc, as well as an update on machining work at Darlington Locomotive Works. Read on for more details....

You'll be hearing from us a couple of times over the next week or so: the latest jam-packed issue of *The Communication Cord* has been printed and will be arriving with supporters imminently - postal strike willing - and our new fundraising campaign launches with the festive season!

THE MONOBLOC EXPLAINED



Click the link below to watch David Elliott (P2 Director of Engineering) explain the beauty and complexities of the monobloc cylinder fabrication. Hear from the man who adapted and developed this design as he talks us through the workings of the 'bloc, during its recent visit to Darlington.

Don't forget that whilst the engineering of this pivotal component is advanced, the Monobloc Club has not yet reached its target. To support this aspect of the build, [click here.](#)

WATCH HERE

DARLINGTON MACHINING WORK



Here and at the top of the page are photos of the cylinder release valves that our apprentice Ed is machining for the P2 at the moment. They fit on the front and back of each cylinder and act as safety valves to release water if the engine carries water over from the boiler.

We are using the BR type valves on the P2 as the original LNER type screw into the cylinder block or cylinder cover and have a habit of disintegrating when you try to remove them after several years in use due to the thread having locked solid. The cylinder block itself has been modified to suit the BR valves which are held on with two studs and nuts, however we had already made patterns and cast the covers before the change was adopted, so Ed has machined adapters for the cylinder covers (the steel item in the picture).

There will be a video explaining the process in more detail on our website later this week.

MAKE A DONATION

SOMEWHERE UNDER THE RAINBOW



Work continues at our new home. The building is now nearing external completion with attention turning to fitting out. This includes such diverse matters as access arrangement, electrical point provision and other fit out requirements.

The build is on schedule for handover in the Summer of 2023 when the Trust will move in.

Last week a spectacular rainbow appeared over the new locomotive works. Unfortunately, there was no pot of gold, so we still need your help to get the new site in shape. Find out more here:

THE P-WAY GANG

In other areas....

- Monobloc is back at Howco awaiting final machining, following its short visit to Darlington for the Convention. This time out moves the delivery of the finished cylinder block into the beginning of 2023. Find out more about [THE MONOBLOC CLUB](#)
- Cambox and valves - the design is mostly complete, once signed off a single cambox will be manufactured then tested to confirm function, strength and durability.
- Tender Frames - these are being manufactured at I D Howitt of Crofton near Wakefield. The frames are substantially complete, the remaining work is to the axle boxes and spring planks before a final coat of primer. Find out more about [THE TENDER CLUB](#)
- Boiler - was due to be delivered mid 2022 but Covid induced delays plus work required on the A1's boiler has delayed P2's boiler delivery until 2023. Find out more about [THE BOILER CLUB](#)
- Pony Truck - is complete but replacement liners need to be welded to the cannon box then machined at Triple T to suit the pony truck. This is also awaiting suitable

welding resource, currently fully occupied with the mechanical modifications to *Tornado* for the Network Rail project to fit the European Train Control System (ETCS) cab signalling.

- Motion - the leading, trailing and connecting rods have been bushed and are fitted on both sides of the loco. They have been successfully driven by the rotator to establish that there is no binding or interference. The inside rod and strap have also been delivered and polished.
- Brake Gear on loco - Brake cross stays finished, pull rod lengths being set to suit actual dimensions of brake gear prior to final welding
- Pipework - further progress has been made with air, vacuum, water and steam pipework, although diversion of resources onto *Tornado* has limited the degree of completion
- ETCS - the similarity between the A1 and P2 in many critical areas is such that most of the large amount of detailed design work (both electrical and mechanical) for *Tornado* will read across directly on to the P2. Once the *Tornado* ETCS test programme is completed successfully in the new year, the design will be replicated on the P2. Mechanically the largest area of work will be the modification of the front of the tender to accommodate the electronic cubicles for the ETCS control equipment.
- P2 support coach - 35457 is currently in traffic with the Dining Train at the Great Central Railway in lieu of any stabling charges. This means that the coach is being regularly inspected, maintaining its current mainline certification. We are currently drawing up the plans that would convert it for use behind the P2 on the mainline. The coach is usable as it is once we have added the dual air brake components but, once funding becomes available, we would wish to improve it to similar standards achieved in the refurbishment of 21249. Find out more about [THE P2 SUPPORT COACH APPEAL](#)

WAYS TO CONTRIBUTE



How to Support No. 2007 *Prince of Wales*

The P2 couldn't have come this far without your help, and we are hugely grateful to all of our supporters. If you are wondering what other ways you can make a difference to this project, here are the many ways to get involved.

- [Sign up as a Covenantor](#) - just £10 per month makes a big difference.
- [Join The Boiler Club](#) - help us fund the beating heart of the engine.
- [Join The Tender Club](#) - get behind *Prince of Wales*.
- [Join The Injectors Club](#) - help inject some cash!
- [Join The Monobloc Club](#) - contribute to this complex component.
- [The Support Coach Appeal](#) - support the home of the support crew.
- [Dedicated Donations](#) - buy a gift for No. 2007!
- [Volunteer](#) - to help with engineering or sales, get in touch!
- [Legacy](#) - a legacy in your will can help secure the future of main line steam.
- [One-off Donation](#) - every little helps, and a lot goes a long way!

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