

# THE MIKADO MESSENGER



2007 PRINCE OF WALES  
Building Britain's Most Powerful Steam Locomotive



A view through No. 2007's smokebox - the smokebox door, chimney and cladding have been removed to allow access for the trial fitting of pipework and conduits - A1SLT

Welcome to edition No. 80 of *The Mikado Messenger*, our monthly eNewsletter which aims to provide a regular progress update on the construction of new Gresley class No. 2007 *Prince of Wales*.

As you will read elsewhere in this issue of *The Mikado Messenger*, significant progress is being made on all current areas of activity including both of our new boilers (where assembly of the first boiler is nearing completion), the heavy motion and the cylinder block as well as the electrical system and the pipe work fitting.

Our newly launched mini-club, The Injectors Club, to fund the acquisition and manufacture of the live and exhaust steam injectors has an initial target of 50 supporters (each donating £1,000) - **the first 11 members have already joined.**

We are pleased to confirm that our online donations system is live on the [P2 website](#) for signing up as a P2 Covenantor, joining any of the P2 clubs and contributing to The P2 Support Coach Appeal.

Due to the ongoing COVID-19 situation, our staff are still working from home or at Darlington Locomotive Works (DLW) where they are taking all the necessary precautions. The Works continues to

remain closed to volunteers, non-essential staff, and visitors. We hope you understand that these circumstances are beyond our control and these restrictions are still currently required. Our Open Days on the first and third Saturdays of the month have restarted - to book your place please click [here](#). Please note that spaces are limited and allocated on a first come, first served basis. If you have booked and can no longer attend, please let the office know as they will make the session available for others to book.

We are reviewing all our activities on a frequent basis in order to secure our long-term future. Please keep an eye on our website and Facebook pages for updates, call 01325 460163 or email [enquiries@p2steam.com](mailto:enquiries@p2steam.com) if you have any questions.

## FUNDRAISING UPDATE

**A P2 for the price of a pint of beer a week:** over 985 supporters have signed up as Covenantors for No. 2007 *Prince of Wales*, from as little at £2.50 per week, and are now kindly donating over £207,000 annually including Gift Aid. If you haven't yet signed up as a Covenantor we would encourage you to get on-board. You can find more information [here](#). **We still hope to reach 1,000 regular supporters by the end of July 2021 as this is the 60<sup>th</sup> anniversary of the scrapping of the last of the former P2s - now is the time to come on-board or recruit a friend!**

**The Boiler Club** has reached 228 members, leaving just 72 spaces available - just over three-quarters of the initial target. **As substantial progress is now being made on our boilers, 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 and the boiler for No. 2007 is due to be delivered to Darlington Locomotive Works (DLW) in 2021. More information about The Boiler Club can be found [here](#).

**The Tender Club** is starting to fill up, with 105 places taken - just over 40% of the initial target. In order to keep on schedule to complete No. 2007 within three years, we need to complete the manufacture of the tender frame this year. Our target for The Tender Club is 250 members, each donating £1,500, so if you would like to contribute towards the tender more information can be found [here](#). **Why not show a little Tender-ness and help us to reach 125 members by August.**

Our newly launched mini-club, **The Injectors Club**, has been launched to raise funds for the acquisition of live & exhaust steam injectors. It has an initial target to raise at least £50,000 from 50 supporters each donating £1,000 plus Gift Aid (in up to four payments of £250) - **the first 11 members have already joined.** More information about The Injectors Club can be found [here](#).

**The P2 Support Coach Appeal** was launched to acquire, overhaul and convert BR Mark 1 BSK E34547 into the support coach for No. 2007. Our initial target is to raise £100,000 from 100 supporters each donating £1,000. Having recruited 53 supporters we have passed the half-way mark. If you would like to contribute towards this appeal more information can be found [here](#). **Help us fund this appeal!**

**The Motion Club** has now reached our initial 175 members target. We may have passed the initial target of The Motion Club but there is still an opportunity to come on-board as there have been a couple of dropouts. You can find more information about The Motion Club [here](#) - **help us to complete the manufacture of No. 2007's motion!**

The Turbogen Club has reached its initial target of 40 members each generously contributing £1,000 and is now closed.

The Pony (Truck) Club has attracted substantial interest, has galloped past its initial target of 20 members and has recruited 32 supporters. You can find more information about The Pony (Truck) Club [here](#) - help us to fund the manufacture and certification of No. 2007's pony truck.

You can sponsor components of No. 2007 *Prince of Wales* from as little as £30, ranging up to £15,000! The **Dedicated Donations** scheme has already raised over £400,000. If you would like to sponsor a component, please email [dedicated.donations@p2steam.com](mailto: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.

To-date, over £3.4m has been spent and almost £4m raised of the over £5m required to complete No. 2007 *Prince of Wales* within the next three years.

If there are any surplus funds left when our fundraising clubs have fulfilled their nominated purpose, we will use the money to buy other components for the Gresley class P2 that the charity would not otherwise have.

## ENGINE FRAME UPDATE



Front screw coupling - A1SLT

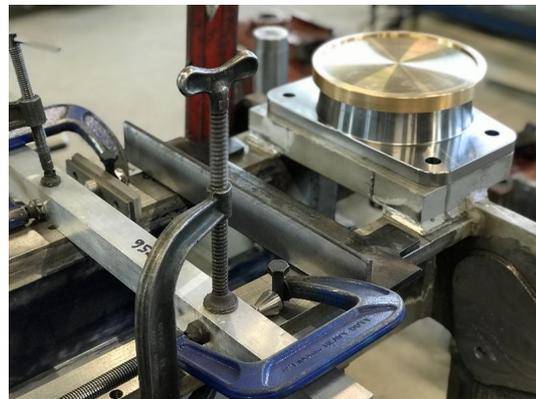
**Summary:** engine's frames erected; all major frame stays, brackets, horn blocks, axle boxes & buffers cast and fitted using around 1,000 driven bolts.

**Progress update:** the entire smokebox (cladding, smoke box barrel & door) has been dismantled and removed to allow access to the space between the frame plates whilst the whole set of various copper pipes which form the air reservoir and train brake runs is being trial fitted; the rear shelf has been fitted and the various electrical conduit boxes have been mounted; one of our volunteers took the front screw coupling home during lockdown and brought it back to the condition shown in the photograph above - this nicely complements the previously polished draw hook.

**Next steps:** prepare a bracket to position the exhaust steam injector on the rear shelf; continue with various pipe runs, including fully connecting air pumps and all bespoke pipe coupling fittings.

**Fundraising:** The Founders Club was established in September 2013 to give the project a racing start and get it to the point of erecting the engine's frame with a target of raising £100,000 plus Gift Aid from 100 supporters each donating £1,000. The Founders Club closed in July 2014 having attracted 360 members and raised around £450,000.

## PONY TRUCK UPDATE



At DLW, the pony truck frame assembly with clamped test bar and spherical bearer cups trial fitted;  
centreline defining angle plate - A1SLT

**Summary:** redesign of the pony truck using side control springs has been completed; the pony truck frame, crosshead and wheelset with cannonbox are at DLW.

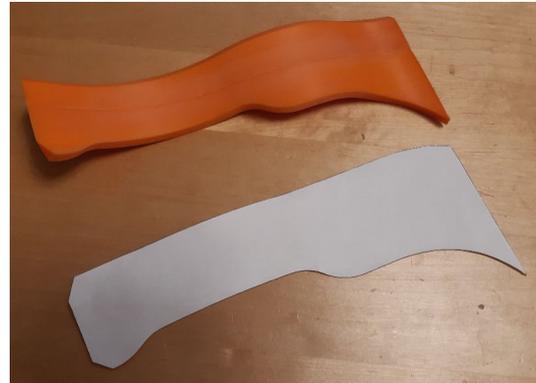
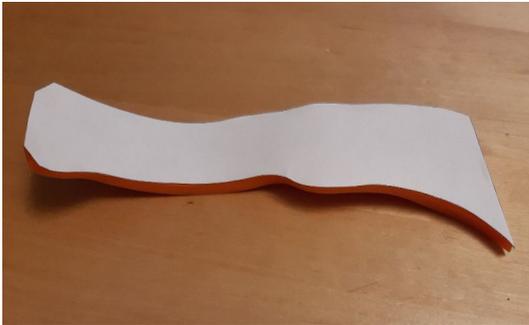
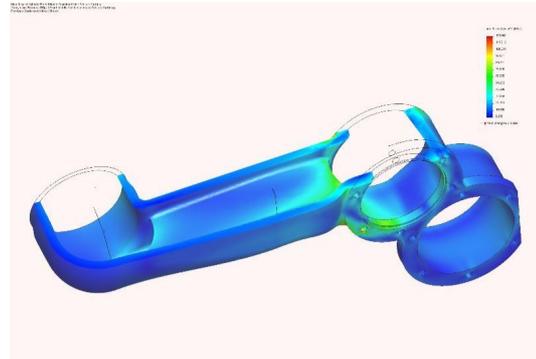
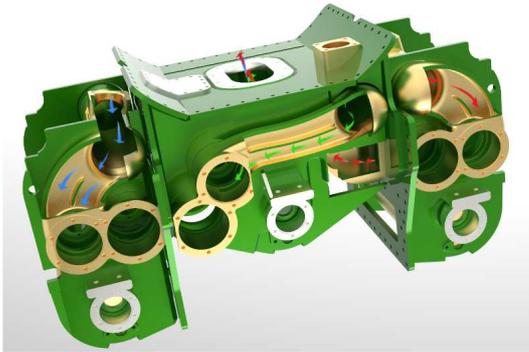
**Progress update:** the dimensional check of the pony truck frame, steering arm and crosshead is complete; the crosshead has required some fitting into the frame to ensure as perfect fit as designed; spring cross beams have been CNC machined to a high degree of accuracy and surface finish, and have been primed; Ian Matthews has machined various profiles for the side control fabricated components and prepared them for welding; the spherical side bearers and cups have also been CNC machined which has resulted in a perfect fit; various side control components have been sent for welding.

**Next steps:** continuing FEA study for approval of the new design; completing machining of principal components; once various side control components have been fully welded, final machining will be carried out at DLW; trial fit of cannonbox onto the wheelset; ordering bronze strips for pony truck cross head bearing surfaces.

**Fundraising:** in April 2020, we launched a £20,000 appeal - The Pony (Truck) Club - to fund the

construction of the leading pony truck for No. 2007 *Prince of Wales*. We set a minimum target of 20 generous supporters willing to donate £1,000 plus Gift Aid (in up to four payments of £250) but this mini-club has galloped away and already passed its initial target. We therefore decided to extend the club by a few members to cover the considerable certification costs associated with the modified pony truck design and we have signed up 32 members to-date. Please consider joining **The Pony (Truck) Club** - for further information click [here](#).

## CYLINDER BLOCK UPDATE



Clockwise from top left - 3D image of the cylinder block; 3D image of the cylinder front and middle combined inlet exhaust casting; 3D printed flattened one-third model of exhaust port; 3D printed one-third model of exhaust port with paper template on it - *Frewer & Co Engineers Ltd/A1SLT*

**Summary:** design studies into cylinder block manufacture and selection of valve gear complete; 3D CAD design of the cylinder block and valve gear substantially complete; further progress has been made in applying the weld details to the cylinder block inside exhaust passages with particular attention being paid to the order of fabrication to ensure that all welds can be completed properly.

**Progress update:** the prospective supplier has been selected and detailed technical and contract negotiations have been concluded - announcement expected shortly; Alan Parkin has updated the detail manufacturing drawings and continues to produce the assembly and machining drawings ready for sharing with our appointed supplier.

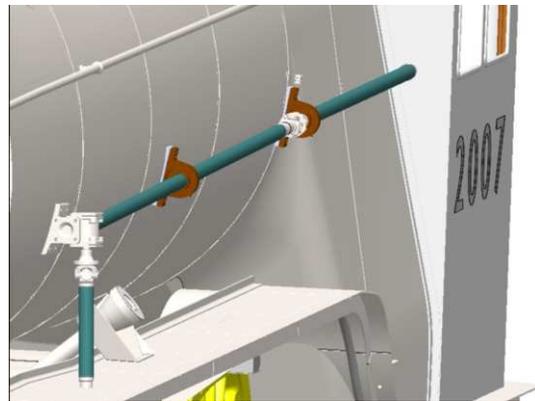
**Background:** one of the more difficult areas of the cylinder block construction is the forming of the curved walls for each of the four exhaust ports. This will be achieved by bending the original shapes out of plate and then gas profiling them to the required shape. Martin Shepherd will use the flatten function in the premium version of Solidworks to develop the flattened shapes from the 3D CAD models. As a double check, a one-third scale model of one of the curved plates has been made using David Elliott's 3D printer and a one-third scale 2D drawing of the component cut out and laid over it to check

that it provides the required shape. A similar approach will then be used by our supplier to lay full sized prints of the developed components onto the previously formed plates to mark out and cut them to the finished shapes; our supplier will make a trial exhaust port from four formed pieces of plate to confirm that the process works and for us to inspect and approve before proceeding with the rest of the cruciform structure.

**Next steps:** machining of the cylinder cover castings; machining of the valve spring guides and covers plus various profiles which will all be required for hydraulic testing of the complete cylinder block; order the cast steel steam ports which form part of the main cylinder block fabrication.

**Fundraising:** The Cylinder Club was founded in October 2017 to fund the redesign and manufacture of the cylinder block with an initial target of raising £100,000 plus Gift Aid from 100 supporters each donating £1,000. The Cylinder Club reached its initial target in March 2018. A new club will be launched shortly to fund the manufacture of the cylinder block now that the supplier has been appointed.

## VALVE GEAR AND CAMBOXES UPDATE



3D printed cambox and screw; 3D CAD of side of boiler with reverser drive cardan shafts - A1SLT

**Summary:** concept design for modified Lentz/Frankin valve gear completed, significant progress in producing manufacturing drawings, patterns for valve covers and details manufactured.

**Progress update:** Martin Shepherd continues to make good progress with detailed drawings and finding suppliers for the components of the valve gear; Warwick Manufacturing Group (WGM) has provided useful advice on materials for valve gear components and a one-third scale model of a cambox produced to enable us to check that the 3D model is essentially correct - Martin is fettling and assembling these components; UK distributor for Gewes (a German firm specialising in cardan shafts and universal couplings) has been approached to refine the specification for both the cambox drive cardan shafts and those for the reverser mechanism.

**Next steps:** continued procurement of parts with a view to making a complete cambox for testing. Completion of 2D manufacturing drawings.

**Fundraising:** A fundraising campaign for the valve gear and camboxes will be launched in due course.

## BOILER UPDATE



Boiler sections of the second boiler prepared for fitting together - *DBM/A1SLT*

**Summary:** boiler design study completed, revised design approved by TÜV Sud notified body and sent to UK authorities for information and comment - no adverse responses have been received; forged foundation ring corners manufactured & machined and regulator castings delivered to DLW - all subsequently despatched to DB Meiningen (DBM); superheater header cast and machined; boiler cladding manufactured, trial fitted to frames and now in storage; boiler order placed with DBM for delivery in 2021; minor re-design of the banjo dome to suit the class P2 cladding completed by DBM; major progress on manufacture of the boiler and its components including the assembly of the barrel sections and marrying up to the inner firebox for the first boiler.

**Progress update:** construction progress at DBM means the delivery of the No. 2007's boiler is on target for the end of 2021 - all of the basic components have been manufactured and uniting of the main sub-assemblies is underway with the first boiler beginning to look like a boiler; the regulator cross shaft has been welded onto the crank (which operates a link between a cross shaft and a regulator) and subjected to Non-Destructive Testing (NDT); regulator handles have been polished and end squares on both regulator shafts machined to a precise fit; both regulator stuffing box assemblies have been hydraulically tested; new gaskets have arrived and together with boiler blanks both assemblies are ready to be sent to DB Meiningen.

**Next steps:** full assembly of barrels and fireboxes; send finished regulator stuffing box assemblies together with gaskets and boiler blanking plates to DBM to facilitate hydraulic testing of the new boilers.

**Fundraising:** The Boiler Club was founded in October 2017 to fund the design modification and manufacture of the boiler with a target of raising £600,000, plus Gift Aid, from 300 supporters each donating £2,000 in up to 16 payments of £50. As of today, The Boiler Club has attracted 228 members who have generously donated over £450,000, excluding Gift Aid. For further information click [here](#) - we must reach our 300 members target in 2021.

**WHEELSETS UPDATE**



The wheelsets have been removed from the engine to allow access for fitting the extensive pipework systems - *CAG Photography/A1SLT*

**Summary:** study into ride and suspension completed using Vampire<sup>®</sup> software; crank axle re-designed to comply with modern standards, approved and manufactured; all engine wheelsets complete and trial-fitted to engine; cannon boxes ready for final fitment to intermediate and trailing coupled wheelsets.

**Progress update:** Ian Matthews has completed the additional machining of the lower coupled cannonbox halves to enable the spring links to be fitted - the castings being slightly oversize in this area have required additional machining; Ian has also altered the shape of spring links around their lower circumference so they are free to rotate when inserted into axle and cannon boxes - this is due to the nature of the corresponding castings; pony truck axlebox bearing spacers have been surface ground to the required thickness and are ready to be inserted into an axlebox assembly - once this task is complete, the axlebox will be re-measured for sideplay which is required for the bearings to maintain their service life.

**Next steps:** assembly of the intermediate and trailing cannonboxes onto their wheelsets; sourcing a contractor to balance the pony truck and Cartazzi wheelset.

**Fundraising:** The Mikado Club was founded in March 2016 to wheel the engine with an initial target of raising £200,000, including Gift Aid, from 160 supporters each donating £1,000. This was extended in

May 2017 to 200 supporters in order to also wheel the tender and raised £250,000 including Gift Aid. The Mikado Club closed in May 2018 having achieved its target.

## MOTION UPDATE



The inside connecting rod being machined at Stephenson (Engineering) Ltd; the six coupling rods and two outside connecting rods at DLW - *Robert Stephenson/A1SLT*

**Summary:** all heavy motion ordered from Stephenson (Engineering) Ltd; leading, intermediate and trailing coupling rods have been fettled and polished to a mirror finish.

**Progress update:** two outside connecting rods delivered to DLW; inside connecting rod and strap being machined; material has been acquired for the gradient pins which connect the coupling rods together; taper plug gauges made to match the tapers in the gradient pin holes in the trailing coupling rod; Ian Matthews has started lapping tapered holes in the rods to achieve a perfect full contact with the plug gauge; 3D data for middle connecting rod has been sent to Stephenson (Engineering) Ltd.

**Next steps:** complete machining of remaining heavy motion; drawing of leading rod bushes including knuckle pin which serves to connect leading and intermediate coupling rods; ordering bronze rod bushes for leading coupling rods; altering design of the oil lids and commencing their machining; ordering material for small plain bushes for intermediate coupling rods.

**Fundraising:** The Motion Club was founded in May 2018 to fund forging and machining of the heavy motion, with a target of raising over £210,000 including Gift Aid, from 175 supporters each donating £1,000 in up to eight payments of £125. We may have passed the initial target of 175 members of The Motion Club but there is still an opportunity to come on-board if you haven't already whilst the motion is being manufactured as there have been a couple of dropouts. For further information on how to become a member click [here](#).

## TENDER UPDATE



The tender tank in green undercoat at DLW; at ID Howitt - the tender brake cylinders trail fitted in the frame; turnbuckle nut being machined - *A1SLT*

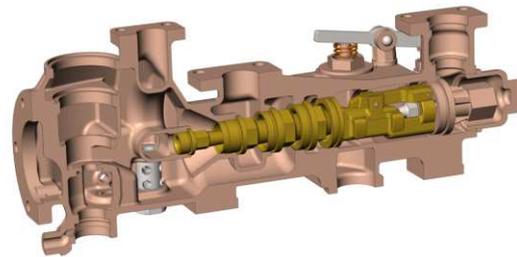
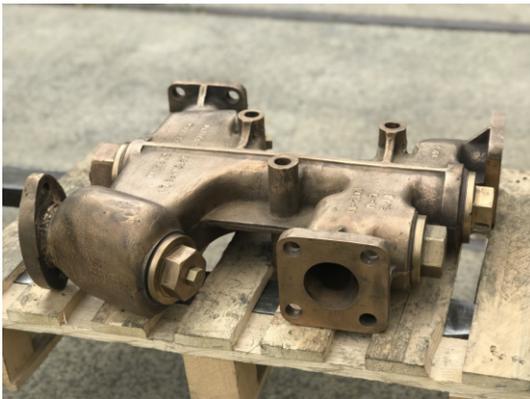
**Summary:** axlebox and other tender castings produced by William Cook Cast Products; frame being assembled by I D Howitt; tank construction by NVES Ltd complete, painted in green undercoat by Ian Matthews and now stored outside under a tarpaulin to create more space inside DLW; tender wheelsets at DLW, having been assembled South Devon Railway Engineering and painted by Ian Matthews.

**Progress update:** all the tender hornblocks have been fitted to the tender frame and work is now concentrating on the tender brake gear; materials and sub-assemblies procured and machined for the brake gear with fitting to frame underway; axleboxes dispatched for machining; brake cylinders trial fitted to frame; further progress with brake pull rods.

**Next steps:** completion of the brake gear and machining the axleboxes; continued 3D CAD work on electrical and pipework layout.

**Fundraising:** The Tender Club was launched in April 2019 to fund the construction of the tender, with a target of raising £450,000, including Gift Aid, from 250 supporters each donating £1,500 in up to fifteen payments of £100. As of today, The Tender Club has so far attracted 105 members who have generously donated just over £155,000 plus Gift Aid - we still have a long way to go to fund the tender's construction. For further information on how to become a member click [here](#). **Why not show a little Tenderness: help us to reach 125 members by August.**

# INJECTORS UPDATE



Cleaned No. 70000 class K exhaust steam injector body and No. 71000 pattern; 3D CAD Davies and Metcalfe class K exhaust steam improved injector assembly section with cones installed;  
Davies and Metcalfe 12mm LV live steam injector - A1SLT

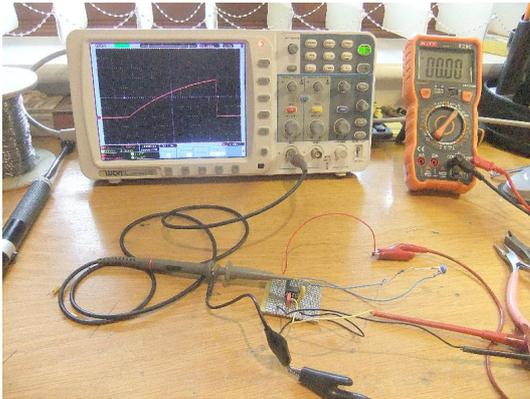
**Summary:** using a Davies and Metcalfe class K exhaust steam injector borrowed from No. 70000 *Britannia*, all the interior components have been drawn as 3D CAD models by Martin Shepherd whilst David Elliott has completed the 3D modelling of the injector body.

**Next steps:** completion of 3D CAD model of class K injector - checking that the pattern agrees with the injector body, (*see above illustration of sectioned 3D model of injector with cones installed*); producing 2D manufacturing drawings for the components design and fabrication of a dedicated tooling for injector maintenance provided by one of our volunteers.

**Fundraising:** We launched The Injectors Club, a mini-club, in June 2021 to raise funds for the acquisition of live & exhaust steam injectors with an initial target of raising £50,000, excluding Gift Aid,

from 50 supporters each donating £1,00 in up to four payments of £250. As of today, The Injectors Club has already attracted 11 members. For further information on how to become a member click [here](#).

## ELECTRICALS UPDATE



Sander start- up delay timer under bench test; partially assembled ADA test rig - *Rob Morland/Alan Parkin/A1SLT*

**Summary:** detailed design of the smaller electrical circuits is approaching completion; the electrical system parts list is substantially complete; quotations for the majority of components have been obtained.

**Progress update:** design work on the smaller electrical circuits is now almost complete; we plan to install an enhanced sander system on No. 2007, featuring a high-pressure burst to get the sanders started, followed by lower pressure to deliver the required amount of sand - the delay circuit for this has been designed and bench tested; a number of bulkhead light fittings have been evaluated as candidates for the underframe and coal space lighting - a potential fitting has been identified and this will be checked for beam shape and intensity under *Tornado*; an extra trunking run has been designed to go from around the centre of the engine, all the way to the front - the drawings to manufacture this trunking continue to be produced with over half now complete; the axle driven alternator (ADA) test rig has been manufactured and build of the ADA is underway for testing on the test rig - designed tweaks from the initial construction of the ADA have been incorporated into this build.

**Next steps:** work will continue on design of the remaining small electrical circuits, selection of lighting components and qualification of suppliers; the ADA assembly and test rig will be finished ready to begin testing; the electrical Standards and Hazard Log documents will be finalised and made ready for submission to Ricardo for design scrutiny; work on 2D manufacturing drawings for the trunking continues.

**Fundraising:** The Turbogen Club has reached its initial target of 40 members each generously contributing £1,000 and is now closed.

## MISCELLANEOUS FITTINGS



Edward Laxton, at DLW, machining a brake cross stay's radiused shoulder width; eight machined cylinder drain cock castings - A1SLT

## Running Gear

**Summary:** brake gear fully designed and mostly manufactured, drain cock linkage (based on A1 design) drawn, components made and trial installation commencing; started assembly and trial fit of the brake system.

**Progress update:** David has 3D printed patterns for the bronze parts of the anti-vacuum valves which will be fitted to the upper sides of the smoke box at the rear end; completed machining of eight cylinder drain cock castings at DLW including LMS type fitting internal cones - Edward Laxton has produced a special tool to maintain a correct depth of a valve seat in respect to an outer surface; brake cross stay radiused shoulder width altered to achieve a correct side clearance on brake hangers once assembled on the engine; bushes machined and pressed into Y-shaped brake hangers and trial fitted.

**Next steps:** measurement of the lateral clearance between the brake cross shaft bushes and shafts to determine the actual side play and adjust the bronze bushes; refurbish newly acquired air brake cylinders; order remaining material and machine all internal cylinder drain cock components.



Sander pipework manufactured, fittings silver soldered and fitted to sand traps- A1SLT

## Pipework

**Summary:** the design is well advanced and installation under way.

**Progress update:** Alan Parkin has continued modelling the pipework through the engine frame plates with attention turning to the exhaust ejector and associated pipework for design; production of 2D manufacturing drawings of the copper pipework continues at a fast pace; imperial & metric copper pipes and GHD pipe fittings have been delivered; sander pipes manufactured, fittings silver soldered;

all sander pipework fitted, including machined coupling nuts to connect them to sand traps; pipe bracket backing plates welded onto frames and pipe clips final fitted; a special air pump exhaust steam compensation loop has been bent to allow for thermal expansion and movement when in use; extended couplings for air inlet pipes to air brake governors have been machined and fitted.

**Next steps:** request quotations for various machined pipe fittings made of bronze; continuation of 3D design of pipework details and 2D manufacturing drawings; quotations are now being sought for the materials to make the numerous LNER style pipe fittings; exhaust pipework and inlet pipework for the ejector will be designed.

## Fundraising

The Dedicated Donations scheme was founded to fund numerous components including the non-ferrous fittings and has raised over £400,000 to-date with new parts being frequently made available for sponsorship. For further information, click [here](#).

## P2 SUPPORT COACH UPDATE



BR Mark 1 BSK E35457 at Great Central Railway; Commonwealth Bogies at DLW - A1SLT

The A1SLT acquired BR Mark 1 BSK E35457 for eventual use as the support coach for No. 2007 *Prince of Wales*. Brake Corridor Second (BSK) E35457 was built at Wolverton in 1963, is fitted with Commonwealth bogies and was most recently used as the support coach for BR standard class 4 No. 76084. In surprisingly excellent condition, E35457 will require minimal work other than the reinstatement of its dual-brakes and the addition of a similar electrical system to that fitted to E21249, No. 60163 *Tornado's* support coach.

E35457 continues to reside at the Great Central Railway and may be pressed into service as a passenger-carrying vehicle when the railway reopens. In addition to a thorough Fitness To Run (FTR) examination by the GCR C&W team, a small band of determined A1SLT volunteers visited recently to conduct further technical inspections of the internal electrical installation and the general mechanical condition. We are pleased to report that the findings were all good and planning continues to identify the work required to make best use of E35457 as a support coach for No. 2007 *Prince of Wales* when it begins operational service. In the meantime, work continues to overhaul a pair of Commonwealth Bogies for use with both support coaches: four wheelsets are currently being re-tired and a set of roller bearings has been ordered from Timken. We are now seeking the air brake equipment required to reinstate the brake system to make it dual braked and identifying the correct design and fit for a vehicle of this type.

**Fundraising:** The P2 Support Coach Appeal was founded in August 2020 to fund the acquisition and overhaul of a support coach for No. 2007 *Prince of Wales* with a target of raising £100,000 from 100 supporters, each donating £1,000 in up to eight payments of £125. As of today, The P2 Support Coach Appeal has attracted 53 members - over half of the initial target. For further information on how to become a member click [here](#). Help us to fund this appeal!



Progress on No. 2007 *Prince of Wales* - A1SLT

**TRAVEL WITH *TORNADO***



No. 60163 *Tornado* crossing the King Edward Bridge, Newcastle on 19<sup>th</sup> June 2021 - Sam Yeeles/A1SLT

It has been a difficult 12 month, with only very limited operation of *Tornado* due to the pandemic. The patience of all our passengers and supporters is much appreciated. We are now in a more positive situation with the locomotive recertified for the next 12 months of operation and a full programme ahead. There is nothing better than main line steam, especially with *Tornado* at the head of the train, so please have a look at the diary below and we look forward to welcoming you on-board.

#### Tornado Railtours 2021 Diary

- Saturday 26<sup>th</sup> June - [‘The Fens and Fells Flyer’](#) - Cambridge to Carlisle and return - POSTPONED
- Saturday 3<sup>rd</sup> July - ‘The Cumbrian Explorer’ - Darlington to Carlisle and return - CANCELLED
- Tuesday 20<sup>th</sup> July - [‘The Viking Venturer’](#) - Linlithgow & Edinburgh to York and return
- Thursday 22<sup>nd</sup> July - [‘The Aberdonian’](#) - Edinburgh to Aberdeen and return
- Saturday 31<sup>st</sup> July - [‘The Aberdonian’](#) - Edinburgh to Aberdeen and return
- Thursday 12<sup>th</sup> August - [‘The Aberdonian’](#) - Edinburgh to Aberdeen and return
- Saturday 21<sup>st</sup> August - [‘The Clyde Aberdonian’](#) - Glasgow to Aberdeen and return
- Thursday 2<sup>nd</sup> September [‘The Aberdonian’](#) - Edinburgh to Aberdeen and return
- Saturday 11<sup>th</sup> September - [‘The Aberdonian’](#) - Edinburgh to Aberdeen and return
- Thursday 16<sup>th</sup> September - [The Jorvik Express](#) - Liverpool to York and return
- Saturday 18<sup>th</sup> September - [‘The Caledonian’](#) - Birmingham to Edinburgh and return - BOOKINGS CLOSED
- Thursday 30<sup>th</sup> September - [‘The Ribbleshead Rambler’](#) - Hull to Carlisle and return - BOOKINGS CLOSED
- Wednesday 20<sup>th</sup> October - [Tornado and Flying Scotsman](#) - Tamworth to Carlisle and return
- Thursday 21<sup>st</sup> October - [Flying Scotsman and Tornado](#) - Birmingham to Carlisle and return
- Wednesday 27<sup>th</sup> October - [Tornado and Flying Scotsman](#) - Middlesbrough to Carlisle and return
- Thursday 28<sup>th</sup> October - [Flying Scotsman and Tornado](#) - Peterborough to Carlisle and return

Tornado Railtours trains can be booked through the links above, our [website](#) or by calling 01325 488215.



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