



60163 TORNADO
New Steam for the Main Line



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



3403 HIGHLANDER
Recreating Gresley's last design

THE COMMUNICATION CORD

No. 78 Spring 2026



Jack Bossett

An LNER 'Azuma' and Tornado stand outside the original NER train shed at Darlington Bank Top Station during the official opening of the new transport hub and additional platforms (seen in the background).

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EDITORIAL by Graham Langer



At a time of increasing uncertainty and political upheaval it is a genuine pleasure to bring you a *The Communication Cord* full of unalloyed good news and positive stories. The past few years have seen the Trust face up to and overcome some enormous challenges but thanks to the determination of the team and the magnificent efforts of our supporters, the forward momentum continues.

In this edition we cover all the action involving *Tornado* during the past couple of months, a locomotive which continues to break new ground and set precedents. Following a storming run to Carlisle with 'The Shap Mountaineer', returning via the Settle & Carlisle route, No. 60163 paid a successful visit to the East Lancashire Railway before returning to Darlington to take part in the opening of the new facilities at Bank Top Station, becoming the first steam locomotive to grace the recently added platforms there. There then followed a canter down the East Coast Main Line, including hauling *Flying Scotsman*, another first for the big Pacific. As I write this, the two locomotives are attracting huge audiences at the Great Central Railway.

The Chairman touches on the encouraging financial news which can be coupled with the wonderful response you have made to the two newly launched clubs, aimed at funding the P2's Axle Driven Alternator (ADA) and raising funds for all the 'furniture' required to fit out the new boiler ahead of steam testing it. Our financial team, headed for many years by Chris Walker and now by Martin Welsh, have kept an iron grip on cashflow for the last few years, steering the Trust through multiple difficulties following the pandemic. This process has been overseen by our accountant Georgina Atkinson and trainee bookkeeper, Alysha Wilkes, who has just passed her Level Three accounting exams, much to our delight! This backroom team quietly gets on with what is a fairly unglamorous but essential role, ensuring that your donations are put to the best use.

Although we are carrying a lot of news about No. 60163 in this edition, Darlington Locomotive Works has been far from quiet. *Tornado* has been in for routine maintenance, we have acquired a Class 08 shunter and a complete valve gear cassette has been printed for No. 2007, enabling us to show exactly how this complicated piece of engineering will function when it has been made in steel! The Works team has been working on re-commissioning the 08, kindly offered to us by Andrew Goodman on long-term loan, a locomotive that will be capable of moving our steam locomotives around. All these stories and many more are covered in this issue of *TCC*. Enjoy!

An appeal! We are hoping to stage an exhibition of A1 nameplates at Darlington Locomotive Works to commemorate the 60th anniversary of the withdrawal of the last of the class, No. 60145 *Saint Mungo*, in time for this year's Convention. If you have, or know anyone who has, Peppercorn A1 nameplates and/or works plates, please contact me at graham.langer@alsteam.com **TCC**.



For many, the first point of contact with the Trust is Jess Lamb, our office manager, who heads up our remarkable administration team.

FROM THE CHAIR by Steve Davies



Although we normally reserve our major excitement levels for developments with our locomotives, engineering and operations, I am nevertheless pleased to announce the equally positive news that at the beginning of May we paid the final instalment of the Covid-related 'CBILS' loan. This facility was arranged back in 2021, with some caution, but we recognized that it represented an essential lifeline during what was to prove to be a difficult financial period (and not just for us!). Without it we may have struggled to emerge from the pandemic and complete *Tornado's* overhaul and the major deliveries on the P2. We now look forward to further consolidation of our finances as we build up our reserves for the next overhaul of *Tornado*, still some years away, and ensuring the resilience of the Trust. One hopes we do not experience another pandemic of course! This is positive news, and is all down to our

fantastic supporters, who continue to fund the inspiring projects we all want to see completed. However, there is no doubt that the servicing of that debt was a collective achievement by the Board, staff, volunteers, covenantors and supporters of which we can all be proud.

Tornado is now firmly settled into its main line and heritage railway routine, reported positively elsewhere in this edition of *TCC*, and at the time of writing is just completing its planned piston and valve exam in preparation for a starring role in the celebrations to mark completion of the multi-million pound redevelopment of Darlington Bank Top Station, to be immediately followed by a run on the mainline to Ruddington at the Great Central Railway (North), in tandem with *Flying Scotsman*. It is gratifying to have another mainline trip over the S&C in for September and look out for other dates shortly. We are also visiting the Swanage railway so the geographic spread continues!

On other fronts, encouraging progress is being made with preparing the P2 to receive its cylinders and

the engineering team are currently constructing a complete set of Lenz-Franklin-Elliott valve gear in plastic using 3D Print technology. It is exciting to see these full-size recreations of the real thing being placed in position on the monobloc, giving us all a clearer sense of how this intricate and very clever apparatus is meant to fit into place and perform, before taking the major step of manufacturing it in steel. Although we have supreme confidence in our design team, it is nevertheless reassuring to see with one's own eyes that the components actually fit, and I personally have a better understanding as to how it works! We hope to demonstrate the plastic valve gear layout at this year's Convention.

In closing, may I remind you of the Convention this year which takes place on Saturday 3rd October in Darlington. There will be much positive news to see and hear, and for me the chance to meet so many of you in a 'family' setting is always the highlight of my Trust year. Thank you so much for your collective support – past, present and future - in keeping 'new steam' alive for future generations. **TCC**



Tornado's future, and that of *Prince of Wales*, depends on young volunteers coming forward to help the team, either as support crew or one of the many other roles such as merchandising. Ian Greenan and Jordan Poole in the cab of No. 60163.

TORNADO ON TOUR *by Jorge Gorman*



On the move into Birmingham New Street from Tyseley with sunrise at around 05:45hrs.

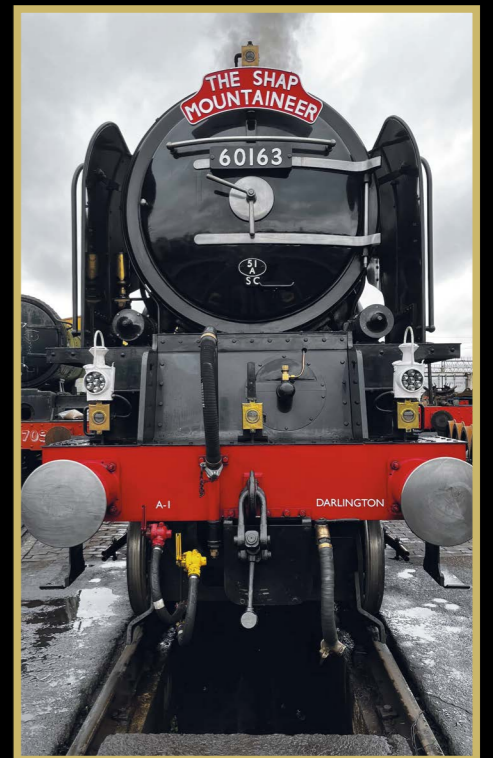
Following a busy period of winter maintenance undertaken at Darlington Locomotive Works, our focus turned to our first passenger operation of the year, 'The Shap Mountaineer'. In preparation for this, on the 24th March we undertook a positioning movement between Darlington Locomotive Works and Tyseley Locomotive Works, via Eaglescliffe, to ensure we were facing the correct way for our timed path at a maximum speed of 60mph.

After a short respite of two days, a fresh group of our support crew arrived at Vintage Trains' Tyseley Locomotive Works, to start preparations for our passenger working in two days' time. The team carried out their normal preparation duties, to ensure *Tornado* was turned out in the same

condition that our brilliant team of volunteers working in Darlington Locomotive Works presented her in during winter maintenance. We also had some additional focus on our first use of the Vintage Trains' water carrier. Early on the morning of Saturday 28th March, we departed Tyseley Locomotive Works, being dragged by a Class 47 at the other end of the train into Birmingham New Street. With *Tornado* now leading, we departed Birmingham New Street, and enjoyed bursts of spirited running through to Crewe, where we took water whilst in the platform. We departed Crewe, now with the Class 47 detached from the train, and running in its own path behind the passenger working. Both ourselves and the Vintage Trains crew were acutely aware that another steam



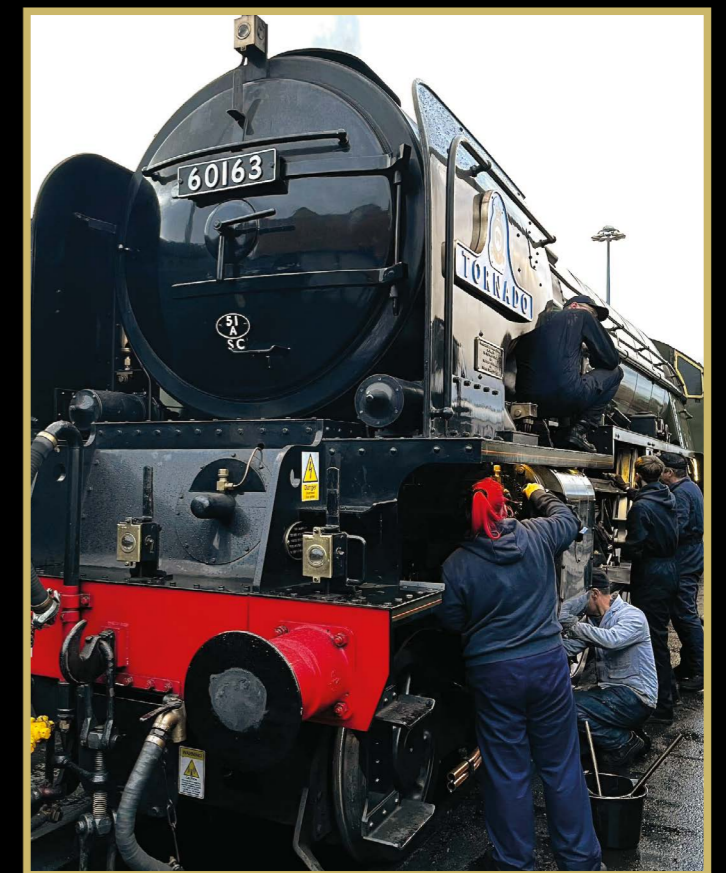
No. 60163 is turned on Tyseley's turntable.



'The Shap Mountaineer' nameboard fitted to the locomotive.

charter was booked to run ahead of us between Carnforth and Carlisle. Members of the public and enthusiasts alike were treated to both steam-hauled charter workings passing through Oxenholme station at speed within three minutes of each other. Sometimes, even those of us that are lucky enough to travel onboard are slightly envious of those who get to witness moments like that! However, those of us onboard would have no complaints, as we began our ascent of Shap, unassisted with a load of eleven vehicles (including the VT water carrier), reaching the summit at a respectable 42mph. We encountered a varied mix of weather on our approach to Carlisle, with hail storms, snow, rain, and bright sunshine all experienced in a short space of time.

Upon arrival in Carlisle, the class 47 was attached for shunting purposes, and we moved to Upperby to carry out servicing activities, before returning to Carlisle station to begin our return journey via the Settle & Carlisle railway. The class 47 was once again split off, and ran in a separate path to Blackburn. We enjoyed some fantastic running along some of the most scenic railway in the country. On arrival at Blackburn, we took water whilst the class 47 was once again attached to the rear of the train, and we continued back to Birmingham New Street via the same route as our outward journey.



Support crew members busy at work cleaning *Tornado* at the East Lancashire Railway.

TORNADO ON TOUR

Upon our return to Tyseley, we turned our attention to our visit to the East Lancashire Railway. With the light engine movement taking place on Friday 3rd April, thanks to the bank holiday we enjoyed some rare pathing for steam workings, running via Manchester Piccadilly, Oxford Road, and Manchester Victoria, twice!

We enjoyed nine successful days of running at the East Lancashire Railway, including one day of driver experiences, three days of their steam gala running (including freight workings), and five days of standard passenger operations. We presented *Tornado* in a late 1960's condition (smokebox brightwork painted black) for the gala, with the decision taken to retain the additional features until our return to Darlington Locomotive Works on Tuesday 21st April.

Upon our return to Darlington, our engineering team had timetabled some running maintenance before our next scheduled movement, taking us to the Great Central Railway (Nottingham) for an event on 16-17th May.

Following the running of 'The Shap Mountaineer', we received the following comments from Neil and Wendy Berry.

"Both Wendy and I are covenanters and we had the most amazing day seated behind No. 60163 on Saturday. It's already our highest mileage locomotive for haulage by a long way but as it's four years since we last travelled we'd maybe forgotten what she's like on the main line. The phrase, "What hills?" comes to mind. She also has a particular sound when in the 70s. 400 miles, what a day. We were concerned at the lack of main line work which is what she's best at. Let's hope for more work soon, especially from the Midlands. Thanks for one amazing day to be added to all the other 8,200 miles we've had with her."

Top: Pre-departure at Tyseley Locomotive works on 3rd April, heading to Bury on an ECS movement.

Centre: *Tornado* at Manchester Victoria station, undertaking a light engine movement as part of a turning move en route to the ELR.

Bottom: David Proctor, DB fireman, and Don Clarke, DB Traction Inspector, posing at Manchester Victoria whilst awaiting the road.



'THE SHAP MOUNTAINEER'



Tornado looks full of running near Waitby, Kirkby Stephen.

TORNADO ON TOUR

'THE SHAP MOUNTAINEER'



Caroline Stearn

Tornado starts the climb to Shap at Greenholme.



Brian Sherrington

No. 60163 arrives at Carlisle on the 'The Shap Mountaineer'.



Peter Anchor

A closer image shows the VT water-carrier coupled behind the locomotive.



Tom Marshall

Above: 'The Shap Mountaineer' is seen at dusk on the return run.



Caroline Stearn

Left: The train is dwarfed by the landscape at Ais Gill.

Below: 'The Shap Mountaineer' nears the finish line at Shap Wells after an outstanding climb.



Graham Nicholas

TORNADO ON TOUR

TORNADO AT THE EAST LANCASHIRE RAILWAY



Caroline Stearn



Above: No. 60163 works a demonstration freight train with an SR 'Queen Mary' brake van behind the tender.

Top: *Tornado* at Ramsbottom Sidings with a Bury to Rawtenstall Service.

Left: A close up of *Tornado's* front end, showing the smokebox furniture blackened to give it a 1960s appearance.

Peter Anchor

15th MAY, DARLINGTON STATION OPENING AND THE MOVE TO THE GCR

Following routine maintenance and a piston and valve examination at Darlington Locomotive Works, *Tornado* was booked to work south down the East Coast Main Line (ECML) in a positioning move to deliver her and *Flying Scotsman* to the Great Central Railway (North) for a gala appearance. The team and support crew members at DLW spent hours cleaning and polishing the locomotive to showroom condition. There can be no doubt that having our own base to service our locomotive is proving to be a boon, not only in giving us the ability to perform regular care in ideal conditions but to allow her preparation to a very high standard in our own covered accommodation.



Jack Baskett

Tornado is prepared for her starring role at the new Darlington Station.

TORNADO ON TOUR

15th MAY, DARLINGTON STATION OPENING AND THE MOVE TO THE GCR

Early on 15th May, No. 60163 made the short journey to Darlington Bank Top for the official opening ceremony of the extended and upgraded station. Having run through the original train shed, *Tornado* was positioned in the new Platform 6, one of a pair serving the Saltburn side of the ECML, reducing conflicting moves across the avoiding lines and offering greater traffic flexibility. These are connected to a brand-new transport hub, linked to the original station via a new footbridge.



The new entrance to Bank Top Station.

Amid appropriate pomp and music from a military band, in front of invited guests, the station extension was officially opened by Rail Minister Lord Hendy who said the investment would “boost growth and jobs across the Tees Valley”. Darlington Borough Council leader Stephen Harker said: “The changes benefit both mainline and local Tees Valley services and mean more mainline services can stop at Darlington per hour than before.”



Above: The AISLT support crew.

Left: The band playing in the entrance hall. Centre: Lord Hendy in front of No. 60163.

Following the ceremony, *Tornado* worked light engine south to York, calling at the National Railway Museum to pick up *Flying Scotsman* and her own support coach for the onward move to the GCR(N). With the A3 coupled inside, the famous pair set off down the ECML to complete the journey to Ruddington. It is fortunate that the GCR(N) is rail connected and we look forward to the day that the gap between the two halves of this section of preserved main line is filled and *Tornado* is able to work all the way through to Leicester (North). **TCC**



Tornado leads *Flying Scotsman* down the ECML.



The 18-year-old and the centenarian!



Above: A nice shot of *Tornado* in traffic.

Left: Sporting a Fox & Edwards headboard, No. 60103 is seen at Ruddington.

AI FOOTPLATE EXPERIENCE *by Barbara Stephens*

People who know me well are aware of two things about me – I have a lifelong fascination with steam locomotives through my grandfather, who drove Castle class locomotives out of Tyseley for the Great Western/ BR Western Region and I am not lucky in matters of chance – I have been doing the lottery since it started and my maximum win is £25. As a result of the former, I have been a Covenanter for *Tornado* since the beginning of the project, and in trying to turn my luck, I buy raffle tickets for all the causes I support.

So, I was both thrilled and surprised when I received a call at the beginning of the year to say I had won first prize in the AI Steam Locomotive Trust Christmas raffle – a footplate experience on *Tornado*. Arranging this prize, around *Tornado*'s commitments, proved challenging for the office staff at the Trust but persistence pays, and it was arranged that I would join the locomotive on the East Lancashire Railway preserved line, at Bury on 16th April.

I was still not sure what the experience would entail, but when I arrived at Bury station and introduced myself as the winner, I found I was going to be travelling from Bury to Rawtenstall, then back through Bury to Heywood, finishing at Bury Bolton Street station some two hours later – I couldn't stop grinning. I think the crew may have been wondering what the female winner was going to be like but were reassured when I arrived, carrying the railway cap I had been given some years ago by a friend to use when running my train set, and wearing socks with the *Flying Scotsman* on them. I also let them know I am an apprentice trained mechanical engineer, which was further reassurance. I sat in the driver's seat, had my photo taken, and remained glued in place for the whole trip.

It was wonderful! I knew what a token (for single line working) was for, and the theory of how they worked, but had never seen one in action. I watched the crew work with skill and good humour and waved to the people along the line who had come out to admire *Tornado* as she passed. I think there are now people in East Lancashire who think grey-haired ladies drive trains! (and what is wrong with that?)



Barbara Stephens in the cab.

Other impressions? The continuous need to stoke the fire to keep the pressure up, even at relatively low speeds, the sheer craftsmanship involved in the construction of the locomotive, coupled with some much newer technology in the cab, and how lucky I was to do the trip in good weather – it would not have been as much fun if the rain of earlier in the month had persisted.

So, all in all, this was a wonderful prize and I would like to thank everyone at the Trust who contributed to a wonderful experience, both in the office and on *Tornado* itself. And to everyone reading this – keep buying the raffle tickets, you could be lucky.

Note – when visiting preserved lines, sometimes there arises the opportunity to offer footplate experience courses. Keep an eye on the Trust website and social media for these occasions. TCC

• SHED NOTICES •

Michael Denholm continues to keep us abreast of AI ephemera coming up at auction, this time it's little different to the usual nameplates or works' plates, a double chimney! He writes as follows, "Another piece of 'AI' hardware which sold for £520 (£598 including buyer's premium) on 16th May at Talisman Railwayana Auctions. The double chimney from one of the last survivors, No. 60124 *Kenilworth*, which had the (understandable) note "buyer to collect from Durham" - a bit too heavy to post or send by courier!"



TORNADO TOUR DIARY 2026

Below are future confirmed visits, tours and operations with *Tornado*

- **Friday 3rd to Sunday 12th July** – Nene Valley Railway
- **Saturday 25th July** – Paddington Bear event at Hopetown
- **Wednesday 9th to Wednesday 23rd September** – Swanage Railway
- **Saturday 26th September** – Vintage Trains 'The Great Northern' - Departing from Birmingham New Street with pick ups at Coleshill, Tamworth, Derby, Wakefield and onto the scenic Settle & Carlisle line. Return via Newcastle & Darlington.
- **Sunday 27th September** – S&DR anniversary at Hopetown
- **Saturday 3rd October** – Annual Convention at DLW
- **Sunday 4th October** – DLW operations

Further tours to be announced for autumn with *Tornado* on the main line.

Book online at alsteam.com/steamtrains, or call 01325 460163 for more information on any of above

RAILTOURS *Sophie Bunker-James*



Sightseers and photographers dwarfed by the massive iconic structure of Ribbleshead Viaduct, clearly visible against the backdrop of the bleak moorland landscape.

This Autumn, experience the golden age of rail travel as *Tornado* returns to Carlisle with the spectacular Vintage Trains raitour, 'The Great Northern'. Departing early morning on Saturday 26th September 2026 from Birmingham New Street Station, this unforgettable journey combines iconic steam haulage, breathtaking scenery, and optional on-board dining as *Tornado* steams north through the East Midlands, Yorkshire, and onto the world-famous Settle & Carlisle line.

Relax in comfort and enjoy delicious on-board dining while taking in some of Britain's most dramatic railway landscapes. From rolling countryside to the stunning Yorkshire Dales, enjoy mile after mile of stunning views from your seat. Arriving in the historic city of Carlisle at 13:30hrs, you'll have two hours to explore its rich heritage, including:

- Carlisle Cathedral
- Carlisle Castle
- Museums and galleries
- Great shops and hostellers

In the afternoon, the journey continues east along the scenic Tyne

Valley Line towards Newcastle, where *Tornado* truly comes alive on home territory with some thrilling high-speed running along the East Coast Main Line. After around 300 miles of steam traction, *Tornado* will bid farewell at Darlington before the final leg home under diesel haulage.

Journey Timings:

'The Great Northern'.

Saturday 26th September 2026

Birmingham New Street: Depart 06:30hrs - Return 23:20hrs

Coleshill Parkway: Depart 06:50hrs - Return 23:00hrs

Tamworth: Depart 07:10hrs - Return 22:40hrs

Derby: Depart 07:55hrs - Return 21:55hrs

Wakefield Kirkgate: Depart 10:20hrs - Return 19:30hrs

Carlisle: Arrive 13:30hrs - Depart 15:30hrs

Whether you're a lifelong steam enthusiast or simply looking for a unique day out with fine dining and spectacular scenery, 'The Great Northern' promises an unforgettable railway adventure.



Tornado, Carlisle Station.



Carlisle Castle.

Seats are expected to be in high demand — book early to secure your place aboard 'The Great Northern'. Find out more and book tickets online at alsteam.com/steamtrains. TCC



'Engine & Van' light engine move to the ELR, seen at Castleford.

ELECTRICAL WINTER MAINTENANCE UPDATE *by Rob Morland*

Locomotive

We completed the annual electrical exams on the locomotive at the beginning of March. The headlamps have had their annual clean and repaint, and the electrical gauges in the cab have been cleaned. All internal inspections of electrical enclosures showed that the systems are currently surviving well. In particular the changes made during the overhaul to improve the resilience of the wiring systems under both crew seats appear to have done what we intended. A big win is that there is no sign of water and coal dust ingress into the fireman's side conduit system, for the first time since the loco was built.

We scheduled the swapping of both turbogens for our spares. These include one of the original Fabeg units, fitted with the new turbine wheel designed by Alan Parkin, together with the third new Meiningen one, built for the ETCS project. The two replaced turbogens ran up well. Both ran quietly under initial testing with no vibration or steam leaks. It was particularly pleasing to test Alan's new turbine wheel on steam for the first time. We shall see how it performs during operations this year.

The tender ADA is currently off the vehicle awaiting modification to include the new clutch. If you would like to see the ADA back on the locomotive very soon then do have a look at our new 'Generating funds for the ADA' Club, and join us if you can! We have two working turbogens, with only one being required for normal main line operation, so our electrical resilience remains excellent.

Support Coach

The annual electrical exams were successfully completed in March. As part of this we replaced the last batch of original smoke alarms, bringing the whole system up to date and finishing the replacement process that we started last year. All the alarms are now good for another 10 years in service.

We also took the opportunity to inspect all our coach 16A shore power cables. These have a hard life, being run out in yards and depots to power the coach system whenever we stop overnight. The cables themselves were found to be sound but many of the connectors were in poor condition, so it was decided to replace them all. This has now been done.

Water Carrier connection

As part of our continued working with Vintage Trains, *Tornado* has been modified to work with their water carrier. This vehicle, a BR GUV (General Utility Van) has a capacity of around 3,300 gallons and with *Tornado's* capacity allows a range of more than 190 miles before needing a water stop.

The connection is very simple and involves a pipe running from the bottom of the tender tank, at the rear, out to just under the buffer beam. A flexible hose is then used to join the two vehicles. Flow rate is about 2,000 gallons an hour. The operation on the 28th March from Birmingham to Carlisle showed that the water stop at Crewe was not needed and the train would have arrived at Carlisle with around 1,200 gallons of water after nearly 200 miles. We expect to see the water carrier in use on future trains to improve operational flexibility and reduce costs.

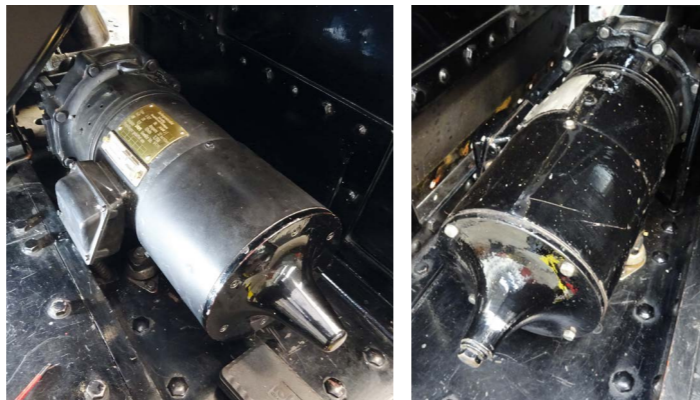
The design consists of pipework underneath the tender tank at the rear of the tender, terminating in a fitting under the rear buffer beam where the water carrier connects. A flanged connection in the tender tank base allows the pipework to be removed if needed, so that the tender tank



Above left: The two in-service headlamps after a year on the front of the loco, looking forward to their annual refresh, and right, headlamp bodies cleaned and repainted.



Headlamps reassembled, ready for another tough year on the front of the loco, fending off pigeons!



Above: Third new Meiningen turbogen, fitted to the driver's side.

Above right: Original Fabeg turbogen with the Trust's new turbine wheel, fitted to the fireman's side.

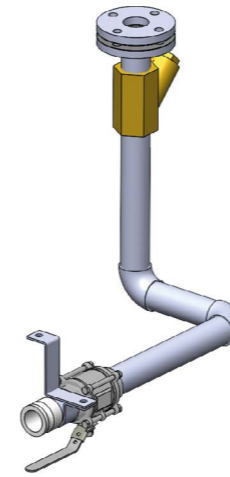
Right: Cab clock and steam chest temperature gauge after their annual clean.



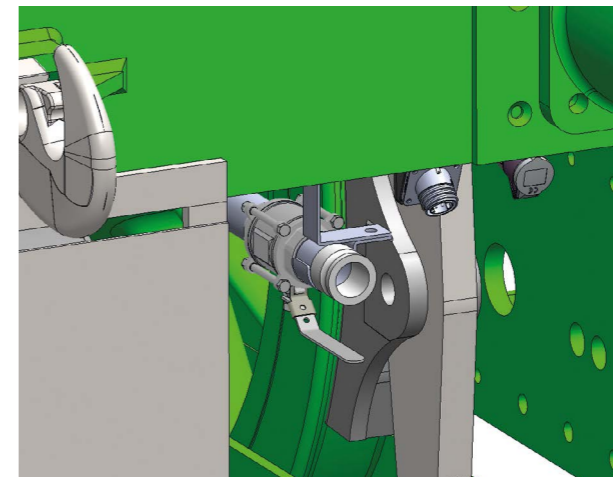
Above: Some of the coach shore power cables, fitted with new 16A connectors.



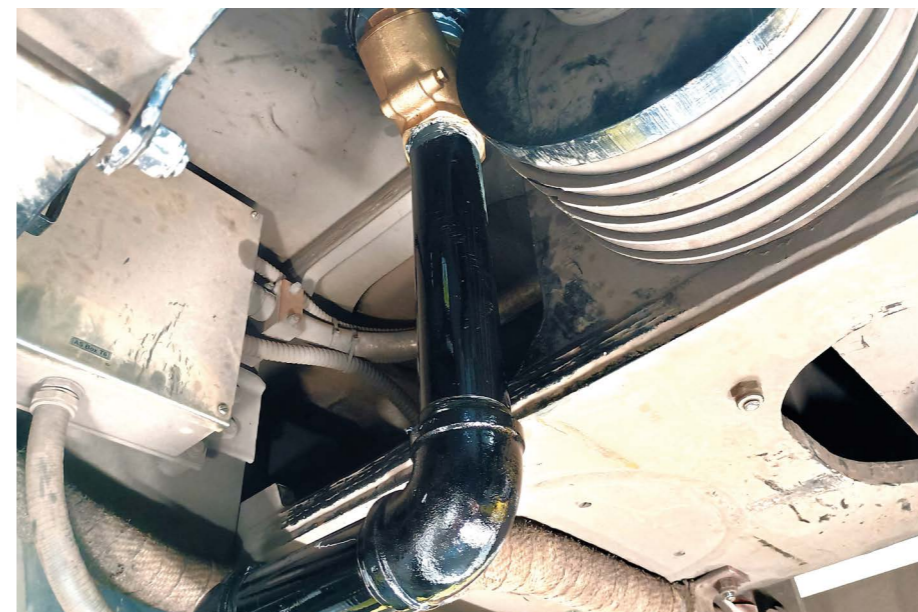
Left: The old shore power cable connectors, just before they went in the bin.



A CAD drawing of the pipework.



A CAD rendering of the connection below the buffer beam.



The down pipe from the water space in the tender.

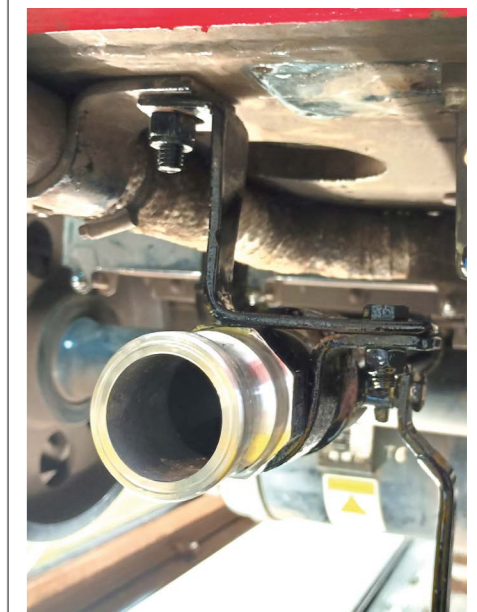
can be removed for maintenance without the pipe assembly being in the way. The pipe is 2" nominal diameter and from the tank base goes through a non-return valve to prevent back flow from the tender water tank into the water carrier. From there it passes through a manual shut off valve, the same type of which has been used elsewhere on the tender. From there it goes to the fitting for the water carrier under the rear buffer beam. The pipework is supported by the flanged connection at one end and a bracket holding it to the bufferbeam at the other.

Planned maintenance period

Following railtour and preserved line duties *Tornado* returned home to Darlington to allow for planned maintenance activities. The first check was to split the engine and tender to enable NDT testing of the drawgear. This was timed to align with a visit from Hitachi to ensure all the ETCS connections were in order at the same time.

Alongside this work a piston and valve exam was carried out as the locomotive had undertaken sufficient miles for this to fall due. This work involves taking out the valves and pistons, examining and measuring all components, and then reinstating the locomotive for operation. This work was achieved in a timely manner to ensure the locomotive met its booked duties on the 15th May.

As well as this activity, and other minor maintenance tasks, the locomotive was subject to a thorough clean by the team at Darlington. It was presented beautifully back to traffic which is a testament to the attention to detail of the volunteers at Darlington. **TCC**



The actual fitting in place.

AI PROFILE – No. 60149 AMADIS by Phil Champion

Emerging from Darlington Works in May 1949 bearing boiler No. 3962, No. 60149 (Works No. 2068) was built after over half the class had been completed. Already 31 had been delivered. No. 60149 was one of two to come in May from Darlington and two from Doncaster. Livery was apple green with black and white lining, old gold used for numerals and letters plus 'BRITISH RAILWAYS' on the tender. It was the last of Grantham's (GRA) initial allocation of four AIs, entering traffic on 31st May. Sightings were between the capital and the North East such as at Oakleigh Park and Darlington.



Amadis, immaculate at 'Top Shed' on 17th July 1958.

Soon No. 60149 was on the move. It joined two York AIs in moving to King's Cross (KX). It arrived there on 10th October 1949 to join five already there. With two new builds the next month arriving No. 60149 was part of an allocation of eleven AIs. Just five months later, on 19th March 1950 it was transferred back to Grantham shed (now 35B). Exactly, one month later it was reallocated back to King's Cross (now 34A).

A change in colour came with repainting into blue with black and white lining in October 1950 following a general overhaul at Doncaster that saw it fitted with boiler No. 29807. This was well down the class, being one of a pair that month following 38 already in blue. While most AIs had their nameplates fitted at Doncaster Works during general repairs No. 60149 along with No. 60128 emerged without them. The nameplates were sent to King's Cross shed which fitted them in December. Naming was roughly half-way through the

class with 28 already named and No. 60149 was one of four named that month. Its name 'Amadis' was one of 13 racehorses carried by the class in the LNER tradition. Amadis had won the 1909 Doncaster Cup.

Amadis was the first AI to be repainted in BR green with orange and black lining following a heavy intermediate repair at Doncaster in August 1951. From 9th September that year it was back on Grantham shed. Steam crews complained of steam coming into the cabs of the AIs and causing them discomfort. There were various causes of this, one being the exhaust pipe from the steam brake, in consequence Nos. 60149 and 60156 had their pipes directed into the ashpan, this modification probably taking place during a further general overhaul at Doncaster in October 1952 (boiler No. 29822 fitted). Workings for this named, green AI were a down passenger from King's Cross on 30th June 1952, the down 'Flying Scotsman'

from Grantham to Newcastle on 21st July 1953 and the 11:10hrs King's Cross-Leeds on 20th September. During August 1953 it was photographed arriving at King's Cross with a relief train from Lincoln of LMR stock and concluded the year with another general repair during October which included the fitting of boiler No. 29826. On 21st October 1954 No. 60149 took over the down 'Flying Scotsman' at Grantham from No. 60144 which had brought it from the capital. A number of times in 1955 and 1956 Amadis was seen bringing the down 'Flying Scotsman' into Newcastle. After a general overhaul at 'The Plant' in April 1955, No. 60149 carried a Diagram 117 boiler (No. 29785), one of 16 class members to carry them at various times.

Following a further general overhaul during August, leaving Doncaster bearing boiler No. 29870, Amadis was back to King's Cross shed for the third time on



Robin Gibson

Above: In BR green with the early emblem, No. 60149 hustles its train through Hatfield in 1957.

Right: Amadis with the 15:15hrs King's Cross-Niddrie goods, 30th May 1957.

16th September 1956. Many departures were noted from the capital with No. 60149 leaving on passenger trains bound ultimately for Edinburgh, Newcastle, Perth, Leeds as well as those for Grantham and Peterborough. A goods train was seen behind the engine on 27th September 1956 when it left with the 15:15hrs King's Cross-Niddrie goods. On 21st December 1956 it failed at Hitchin with the up 'Northumbrian'. A photo of No. 60149 on 19th June 1957 on that same working seen in the north London suburbs was used as a BR publicity photo. Named trains pulled

from King's Cross over the next two years were 'The Talisman', 'The Tees-Tyne Pullman', 'The Yorkshire Pullman', 'The Aberdonian', 'The Northumbrian' and 'The Heart of Midlothian'. Around 1957 No. 60149 was recorded as reaching 97mph on the lower section of the East Coast Main Line and on 29th April Amadis was on the down eleven coach 'Yorkshire Pullman', driven by Bill Hoole with Allan Garraway firing plus Alan Pegler and Inspector Goodhand accompanying them to Doncaster. The engine had been reported for rough-riding but it

steamed splendidly and was extremely powerful uphill, as was typical of the class. It left King's Cross on time and despite suffering 12 minutes of delays arrived at Doncaster five minutes early. Fresh out of 'The Plant' following a general overhaul and now carrying boiler No. 10594 and with the later BR crest was applied to the tender, Amadis worked its most prestigious train on 26th June 1958 with the Royal Train between King's Cross and Sleaford, one leg of a journey conveying HM the Queen and HRH the Duke of Edinburgh to Lincoln and Scunthorpe, Class B1



Amadis passing Belle Isle on 'The Launch Special' (Madge Wildfire behind).



Amadis backs onto its train at King's Cross, 1st September 1962.

Eric Vogel



Nigel Kendall



Bill Reed

Left, No. 60149 on Doncaster shed, 4th April 1964 and right, an undated view at Grantham (the reversed headboard bears the chalked inscription, "Return to Copley Hill 56B").

Nos. 61258 and 61074 handling the next leg. The Royal party visited the docks and steelworks. *Amadis* continued in the limelight during July that year, on the 17th it was called on to haul a special for the launch of turbine oil tanker Overseas Explorer at the Furness Shipbuilding yard, Peter Townend, the King's Cross shedmaster, recording the 'bullshine' applied by his staff for the occasion in the following photos.

After alternating between three spells each at Grantham and King's Cross sheds, *Amadis* was transferred to Doncaster (36A) on 28th September 1958. Passenger workings were between Newcastle and King's Cross like the Newcastle-Doncaster train of 12th October 1958 and the up morning 'Talisman' arriving at King's Cross on 23rd December. The locomotive concluded the decade at Doncaster, having a general

overhaul during the Christmas period and receiving boiler No. 29875. By contrast to much of its previous work, it was seen on the 16:50hrs Leeds Central-Doncaster local passenger train on 10th May 1961 at a time when Doncaster had more AIs than it had work for them.

No. 60149 spent most of November and December 1961 at 'The Plant' having its final general overhaul and being fitted with the last boiler it carried, No. 29823. By 1962 No. 60149 was seen on a greater mix of work as happened generally to the rest of the class in this period. The 1A12 King's Cross-Newcastle passenger on 17th October 1962 was followed by returning with the 3E22 Aberdeen-King's Cross from Newcastle. On 29th November it worked the up BP tanks through Newcastle. Passenger trains included an Aberdeen one into King's Cross and on 8th January it had worked the 3G34 York-

Newcastle parcels. *Amadis* pulled a Hull-King's Cross special from Hull on 21st June 1963. The 'Anglo-Scottish Car Carrier' was hauled between King's Cross and Newcastle on 25th September. *Amadis* was withdrawn from service on 7th June 1964, one of two that month in addition to the 16 AIs had already been withdrawn. Yet on the 13th it hauled the 1A17 10:10hrs Edinburgh-King's Cross from Newcastle. On 23rd June it was lying withdrawn on Doncaster shed. In January 1965 it was sold for scrap to Cox & Danks of Wadsley Bridge.

This history was compiled by Phil Champion based on the RCTS book "Locomotives of the LNER Part 2A", a database supplied by Tommy Knox of the Gresley Society, "The Power of the AIs" by Gavin Morrison and various published photographs. Revised and updated by Graham Langer, July 2020. TCC

08 ARRIVAL AND RESTORATION by Richard Snowdon

We have confirmed an agreement with Railway Support Services (RSS) for the long term loan of diesel shunter 08927 (D4157), which will take up duties as the depot shunter at Darlington Locomotive Works.

Completed in December 1962, 08927 is widely recognised as the final Class 08 shunter ever constructed. The locomotive is currently undergoing a comprehensive overhaul, with volunteers from the A1 Steam Locomotive Trust set to assist with the concluding stages of the work and subsequent testing. Once commissioned, the locomotive is expected to serve as the Works' resident shunter for a minimum period of five years.

Part of the deal was to recommission the locomotive's engine and initial inspections suggested this wasn't going to be too bad a job. However, once we got the locomotive into the works and started dismantling it, we found that the number two cylinder had seized.

This then changed the course of work and we have started a full rebuild on the engine, initially removing all the cylinder heads, fuel pumps, pistons and rods and liners. The cylinder heads have all been cleaned, pressure tested and crack detection sprayed and are all OK, the liners have all been cleaned and it was found



08927 stands in the sunshine outside Darlington Locomotive Works.

Jack Boskett

that three of the liners have extensive corrosion and so require replacing. The locomotive will receive a new set of fuel pumps and injectors, All the parts are being supplied by RSS. Once the engine is rebuilt and running there are a handful of

electrical jobs to complete before we can start testing the locomotive up and down the track at Darlington Locomotive Works. Once testing has been carried out the locomotive will come back into the works and receive a full repaint. TCC



Above: A selection of images showing the work involved in getting the 08 back into service.

P2 ENGINEERING UPDATE by Terry Graham



The Raising Steam Club

This was launched at the end of March to raise funds for the equipment necessary for the boiler to be steamed and formally certified. The essential components required include both safety valves, gauges, gauge glasses and the fire grate. Some of these items have already been generously funded via dedicated donations. We are contacting potential suppliers to confirm prices and lead times but cannot place orders until the funds are available. As fund raising continues to go well we are in a position to now order the grate once final checks and quotes are to hand.

Cylinder block

The measurement study of the cylinder block is complete so the next step is to find a way of lifting the six-ton block. We would love to have a 10-ton overhead crane but our current funds don't come close to the amount we would need so we have looked at other solutions. The least expensive direction has been to purchase a large second-hand 'A' frame. This is massively cheaper than a crane but means we can only lift and move the cylinder block across the track but since we can roll the locomotive forwards and backwards so can still have three dimensions of movement. There are not many suitable 'A' frames on the market but we did find one with a 20-ton lifting capacity and 15-ton hoist, which has been purchased. We are currently repainting the legs and when we have space in the workshop in late May, we will concentrate on refurbishing the hoist. One problem with the 'A' frame is that its total height is seven metres and the workshop lights are only 6.5m from the floor so we are currently lifting the lights to 7.5m!

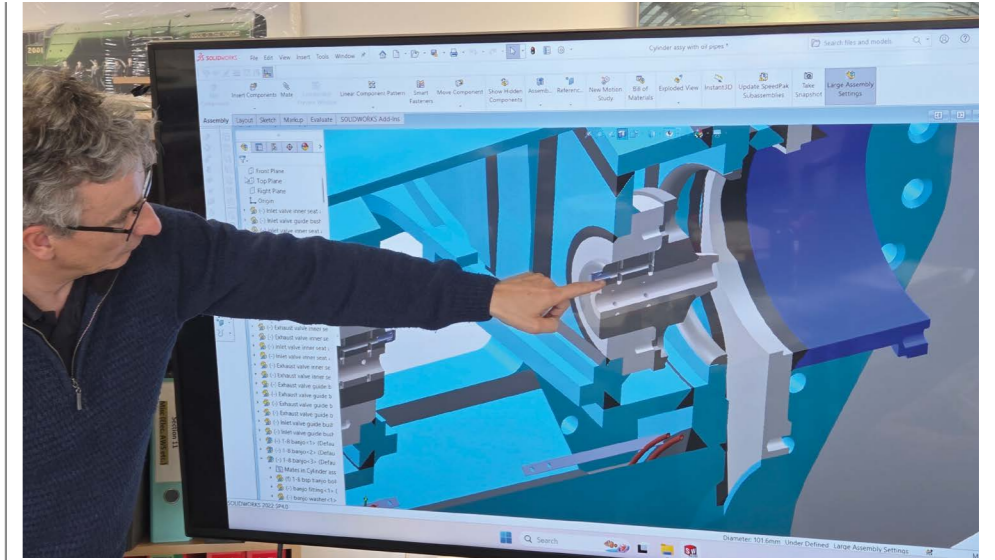
As mentioned previously we were concerned that the lubrication ports were not machined in the cylinder block so have researched the design options looking at those in the original P2 cast cylinder block and the ones in *Tornado* and concluded that we can fit them after the cylinder block has been installed.

Some images of the newly acquired 'A' frame, now being refurbished at DLW.



Cambox

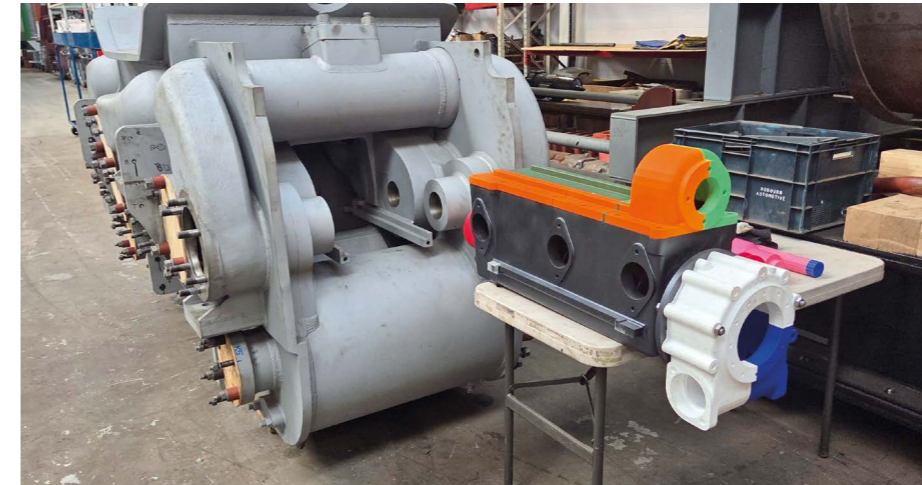
An engineering team lead by Graham Nicholas, including Alan Parkin, Richard Peck, Martin Shepherd and Terry Graham, has been established to accelerate progress with the cambox. The current design has been reviewed and we have started the manufacture of a full-size 3D printed version. The aim is to fit the 3D printed assembly to the fabricated cylinder block to check all interfaces, e.g. valves, and driveshafts. The 3D printed parts will be great tools to assess feasibility issues for both casting and machining. With the exception of the cambox (the largest component), AI volunteer Peter Scott is making the parts on his own 3D printer.



Martin Shepherd points out one of the valve components.



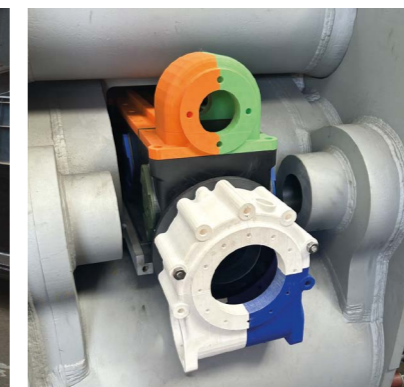
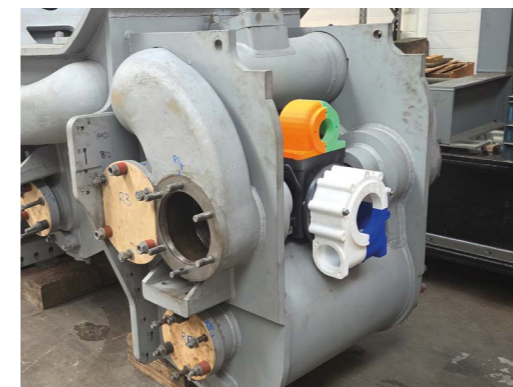
Above: (from left to right) - A pile of full-size printed valve and cambox parts, the cambox with its lid off showing the camshaft in place, then two images showing the assembled cambox.



Left: The cambox, fully assembled, ready to be slid into place between the valve port faces.

Bottom left: The cambox pushed fully home, illustrating how simple it will be to remove the entire box for maintenance.

Bottom right: With the cambox in place, the gearbox for the shaft from the driving axle can be seen, turning the motion 90 degrees to operate the camshaft.



Draw hook

We have now purchased the stainless-steel discs and rubbers for the front draw hook. We will look to assemble them and fit the draw hook which will be needed to safely move the locomotive when we need to move the locomotive under the 'A' frame. **TCC**

P2 FUNDRAISING *by Sophie Bunker-James*

Together, we are building the P2 - Every component fitted, every drawing completed, every casting commissioned — it all happens because people choose to be part of building No. 2007 Prince of Wales. People like you. Across our funding clubs, supporters are helping turn one of Britain's most ambitious steam locomotive projects into reality. Together, we are building the P2 piece by piece.

Raising Steam Club (50/100 supporters — £25,000 / £50,000)

- Already 50% subscribed! Let's keep that pressure building!

Steam testing the boiler moves another step closer thanks to the people funding the vital fittings needed to bring No.2007 to life. The largest component missing from the boiler is the rocking grate which sits within the firebox. This substantial piece of engineering costs around £20,000 alone and, thanks to your donations, we can now place the order! It's a reminder of both the scale of this project and the power of our collective support.

Already, 50 supporters have each donated £500 towards the boiler fittings and steam testing programme. Every donation is ringfenced specifically for this critical work. With the grate under order, our attention will turn to gauges and pipework on the backhead before looking to commission the steam test in due course. This locomotive is being built because people are stepping forward to make it happen.

visit:

www.a1steam.com/raisingsteam

or scan QR code

for more information

and to support this project.



Valve Gear Club (80/300 supporters — £80,000 / £300,000) - The unique P2 valve gear continues to move from concept to reality.

Detailed manufacturing drawings are now being finalised so final quotations can be secured, while the first cambox casting is a key target towards full manufacture and assembly.

Thanks to the generosity of supporters, the design process is already well underway. Initial 3D printed components are helping prove the engineering concepts before full production begins.

Every donation helps transform drawings into working machinery.

Every supporter helps build the motion that will power the P2 into the future.

visit:

www.a1steam.com/p2valvegear

or scan QR code

for more information

and to support this project.



Gresley Class P2 No. 2007 Prince of Wales outside DLW.



Following the launch of The Raising Steam Club and with help from our supporters £ 25,000 of the £ 50,000 target has already been reached.



No. 2007's boiler in DLW.

ADA Clutch Trial & Design Club (15/15 supporters £15,000 / £15,000)

Target reached, thank you!

With funding now in place thanks to our generous supporters, the electrical engineering team is continuing development of the axle-driven alternator — a vital system that will power the locomotive's electrical equipment in service.

This Club has proven how a small group of people can make an enormous difference to this project.

Once the new clutch design is certified, further funding will be required to build the ADA for the P2. Watch this space for updates! Following the launch of the club and receipt of the first funds, work has begun on fitting an overload clutch to the first ADA. The initial funding is being allocated as follows:

Ricardo engagement - An order is being placed with Ricardo, the notified approval body, to provide independent scrutiny of the clutch fitting project. A quote has been obtained and work will be overseen from the outset to ensure compliance and resolve issues early. On completion, Ricardo will issue the certification required for reinstallation of the modified ADA.

Clutch supply - An order is also being placed with the clutch manufacturer for an off-the-shelf overload clutch assembly. Selection has been made in collaboration with the supplier using ADA operating data to ensure correct specification. The unit will be supplied as a complete, pre-assembled package, along with a dedicated adjustment tool.

Design integration - Detailed design work is underway to integrate the clutch into the ADA. Space has been confirmed as sufficient, and the main input shaft is being redesigned to accommodate the new assembly, alongside minor surrounding modifications. Once complete, updated drawings will be issued for manufacture.

Join the team helping bring modern reliability to Britain's most powerful new steam locomotive.

Visit:

a1steam.co.uk/p2ada

or scan QR code

for more information

and to support this project.



Injectors Club (39/50 supporters — £39,000 / £50,000)

Once the boiler fittings are complete, attention turns to another essential system: the injectors. Without them, water cannot be fed into the boiler — making them a critical part of the journey towards completion and operation.

The Injectors Club is one of our smaller funding groups, with just 11 more supporters needed to reach the target. A relatively small number of people can help fund one of the final key steps towards a working locomotive.

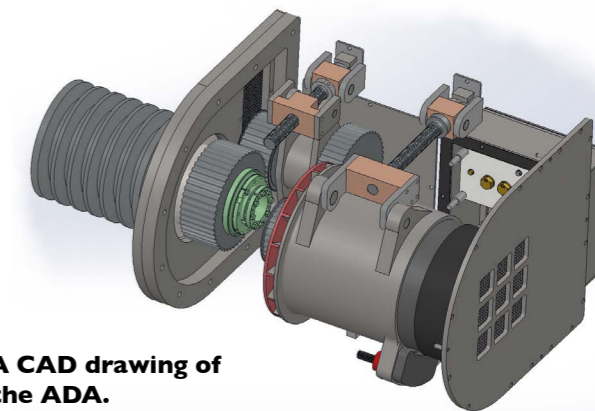
Visit:

a1steam.com/p2injectors

or scan QR code

for more information

and to support this project.



A CAD drawing of the ADA.

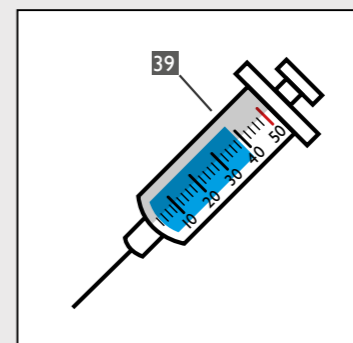
Every Pound Builds the P2 -

Like everything else in modern life, rising costs and inflation continue to affect the construction of No. 2007. Materials, manufacturing and engineering costs continue to increase — which makes your support more important than ever before.

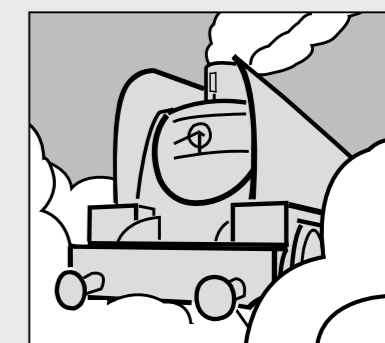
Whether it's a one-off donation, joining one of our clubs, or increasing your regular contribution, every pound directly helps move the project forward.

When construction of No. 2007 began, a pint cost around £2.90 — and only £1.25 back in 1990 when we started building *Tornado*. Today, £5 a pint is no longer unusual. With this in mind, if you wish to increase your Direct Debit or Standing Order, please call 01325 460163.

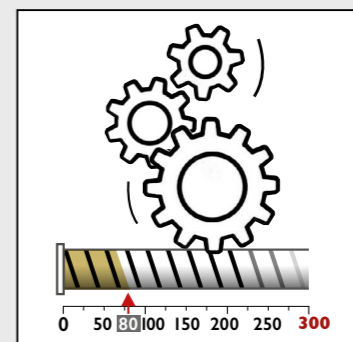
Help us to maintain the phrase “A P2 for the price of a pint each week”, and build a brand-new main line steam locomotive for future generations.



Injectors Club - 39 supporters.



Raising Steam Club - 50 supporters, (target - 100)



Valve Gear Club - 80 supporters.

DLW Open Days - Open Days at Darlington Locomotive Works are held on the first full weekend of the month, 10:00hrs to 15:00hrs.

Covenantors - From as little as £10 per month, your regular donation makes a huge difference. If you haven't already done so, please consider joining us today and become a part of something special. Visit our website at www.p2steam.com/support/regular-donations for more information. **TCC**

BECOMING THE PUBLIC FACE OF STEAM'S FUTURE

by Richard Courteney-Harris

Inside the Role of an AI Steam Locomotive Trust Ambassador- Few organisations in the world can claim such a singular and ambitious purpose as the AI Steam Locomotive Trust. With just two core objectives - to build new main line steam locomotives and to operate and maintain them on the national network. The Trust occupies a unique place in Britain's engineering and railway heritage. But transforming complex engineering projects into living, breathing main line machines takes more than skill in the workshops at Darlington Locomotive Works. It also requires people: passionate, articulate advocates who can connect the Trust's work with communities across the country. That is where the AISLT Trust Ambassador comes in.

A Regional Voice for a National Mission-Trust Ambassadors become the AI Steam Locomotive Trust's key representatives on the ground. Although home-based, each Ambassador works closely with the Trust's Directors and the team at Darlington, acting as the public face of AISLT within a defined geographical area. Their role is to ensure that when the Trust's name is mentioned, whether at a heritage event, a local exhibition, or a station platform during a main line visit, it is associated with inspiration, professionalism, and excitement about the future of steam. As volunteers, Ambassadors play a crucial bridging role between the Trust and the wider public. They raise awareness of AISLT's work, promote new initiatives, support fundraising activity, and—most importantly—spark conversations. Through public speaking, personal engagement, and digital advocacy, they help translate engineering ambition into shared enthusiasm.

More Than Events and Campaigns While attending Trust supported events and acting as a local point of contact are central parts of the role, the influence of a Trust Ambassador goes far beyond any single engagement. Ambassadors are encouraged to think creatively and act opportunistically, identifying ways to maximise the Trust's presence and impact wherever steam captures attention. When an AISLT locomotive is operating in their region, the Ambassador becomes the focal point for activity—connecting supporters, welcoming newcomers, and ensuring that each appearance leaves a lasting impression. Over time, this consistent and visible advocacy builds trust, loyalty, and momentum within local communities.



Autonomy, Initiative, and Impact Ambassadors are granted a high degree of autonomy. Rather than following a rigid script, they are trusted to seize opportunities as they arise, adapting their approach to suit different audiences and circumstances. This independence allows motivated individuals to turn personal energy and ideas into tangible benefits for the Trust. Working alongside Volunteer Managers, Ambassadors also help attract and organise volunteers for regional events, strengthening the Trust's grassroots support network and ensuring that enthusiasm is matched by capacity.

The Skills That Make an Ambassador-Successful Trust Ambassadors tend to share a common mix of skills and personal qualities. Strong communication is essential—both speaking and listening. Whether addressing a room, chatting with a supporter, or explaining the Trust's work to a curious passerby, Ambassadors must be able to tell the AISLT story clearly and persuasively, while also listening attentively to feedback and ideas. Equally important is the ability to network. Building and maintaining relationships with donors, volunteers, stakeholders, and fellow enthusiasts expands the Trust's reach and uncovers new opportunities for engagement. Adaptability, resilience, and creativity are vital too; Ambassadors must remain flexible and positive as circumstances and priorities evolve.

In an increasingly digital world, confidence with social media and online platforms is a growing advantage. Ambassadors who can help create engaging content or amplify the Trust's message online play a valuable role in reaching audiences far beyond

traditional events. Above all, integrity and dependability underpin everything. As representatives of the AI Steam Locomotive Trust, Ambassadors are expected to embody its values, act responsibly, and follow through on commitments, building credibility that lasts long after the sound of exhaust beats fades into the distance.

A Role Driven by Passion - Perhaps the most important qualification, however, cannot be taught: a deep, genuine passion for what the Trust stands for. Ambassadors are people who believe in the relevance of main line steam today, who can “hold a room” with an engaging presence, and who are motivated by the idea of helping an extraordinary vision continue to thrive. For those individuals, becoming an AISLT Trust Ambassador is not simply a volunteer role—it is an opportunity to help shape the public story of one of Britain's most remarkable modern railway achievements.

If This is You...—and you think you can help, please do get in touch with us. Email me at richard.courteney-harris@aisteam.com for a more detailed job description. Should you want to chat about the role, we can also arrange that then. A final word: there is probably no individual person out there with all the attributes described. So, if you even have just a couple of the qualities and you want to be involved, please do contact me; it will be great to hear from you.

Stop Press-The Trustees are delighted to announce the appointment of the Trust's first-ever Trust Ambassador, marking an important milestone in the development of the initiative. Seve Gomez-Aspron MBE has been appointed as Trust Ambassador for the North West. Seve is the current Mayor of St Helens, a longstanding railway enthusiast, and a committed supporter of the Trust. He has attended the Trust's Annual Dinner for the past two years and is well acquainted with its work and objectives. With significant influence across the regional transport sector, Seve is well placed to support the Trust through his extensive high-level contacts. His strong commitment to supporting veterans also closely aligns with the Trust's own service-focused activities. Trustees are pleased to move swiftly from concept to action and look forward to working closely with Sev as the Trust Ambassador programme develops further.

TCC

Seve Gomez-Aspron MBE - A personal statement for The AI Steam Locomotive Trust

Being from Newton-le-Willows means that we are imprinted from an early age with the significance of our proud railway history as the mid-point on the Liverpool to Manchester Railway! Home to the former Vulcan Works and Viaduct Foundry, locomotive and wagon production runs through the veins of generations of Newtonians! Living on the former Vulcan Works site, I ensured that every street was named in recognition of the Works, with Deltic Close, Liberation Road, Drewry Grove and Paxman Close. The railway is a passion I've had since being a kid.

Becoming the Town's youngest ever Councillor in 2012, and climbing to become the youngest ever Mayor, Deputy Leader and Cabinet Member for Transport, I have used my passion for transport and rail infrastructure as the Borough's representative on the new Liverpool-Manchester Railway Board, securing £20m in levelling up funding to reopen and refurbish Earlestown Station, supporting the acquisition of

the new Class 777 locomotives at MerseyRail, securing £15m to rebuild Lea Green Station and progressing the businesses cases to rebuild Carr Mill Station and reopen the former Sutton Oak Link in St Helens.

Stepping down from the Council in May after 14 years allows me to focus on more community projects, such as the Liverpool & Manchester Railway bicentenary in 2030, and by continuing to support the amazing work done by the AI Trust in producing modern, mainline locomotives in a place as historic as Darlington. I look forward to championing their work in the Northwest, an area not far behind the Northeast as the crucible of railway heritage and invention! TCC



Seve Gomez-Aspron.



Newly appointed Trust Ambassador Seve Gomez-Aspron with Tornado at DLW

P2 DEDICATED DONATIONS UPDATE *by Liz Gibson*



Rather than focus on a theme for this edition of Dedicated Donations, I thought it would be nice to offer up a selection of the smaller parts and fittings that are just as essential to the completion of the engine as the bigger, shinier bits. These smaller items can often be over-looked, however, without

them the larger pieces are nothing but expensive decorations. Starting with a rather decorative part, a section of handrail baton can be your gift for £40

A relatively tiny piece, but one essential for maintenance; a washout escutcheon for the new boiler is £70 Still boiler-focused, T-bolts and Nuts for a superheater header are £95 a-piece

If you would prefer to donate to something more current, and as work is continuing in preparation for the fitting of the Monobloc, this selection of parts will all be essential purchases in the not-too-distant future!

An inlet or exhaust valve cam follower can be sponsored for £850

An inlet valve forward or reverse cam can be covered for £1,800!

Of course, there are myriad other mechanical parts which are needed to complete this Monobloc marvel, so if there is something not mentioned that appeals to you, please get in touch – the list is long and if it hasn't already been sponsored, everything is available.

As always, every part sponsored, no matter what the cost,

makes a wonderful and generous gift both for yourself or a loved one, and helps us edge ever further towards completion. We are post-Christmas and coffers are often feeling a bit squeezed at this time of year, so it is worth reminding you, our valued supporters, that it is entirely possible to sponsor one of the more costly parts by paying in instalments – if this would be of interest and may make the impossible possible, please do get in touch.

If you're more keen on process than function then how about narrowing things down by looking at a type of manufacturing method? Parts for the engine can be

- Forged
- Welded
- Cast
- Laser cut
- Machined
- Rolled

...and all then expertly fitted together at the Works in Darlington. Our new building is open for visitors, why not come along and see how all the wonderful contributions, sponsorship and donations come together to build an engine? Whatever the cost, size, placement or function, every sponsored item gets us one step closer to bringing this incredible locomotive to life. If you're interested in finding out more, please email Liz Gibson at dedicated.donations@alsteam.com and ask for more information about the parts available.

If you know of a business owner or company who may be interested in sponsoring an item on No. 2007 *Prince of Wales*, please contact dedicated.donations@alsteam.com

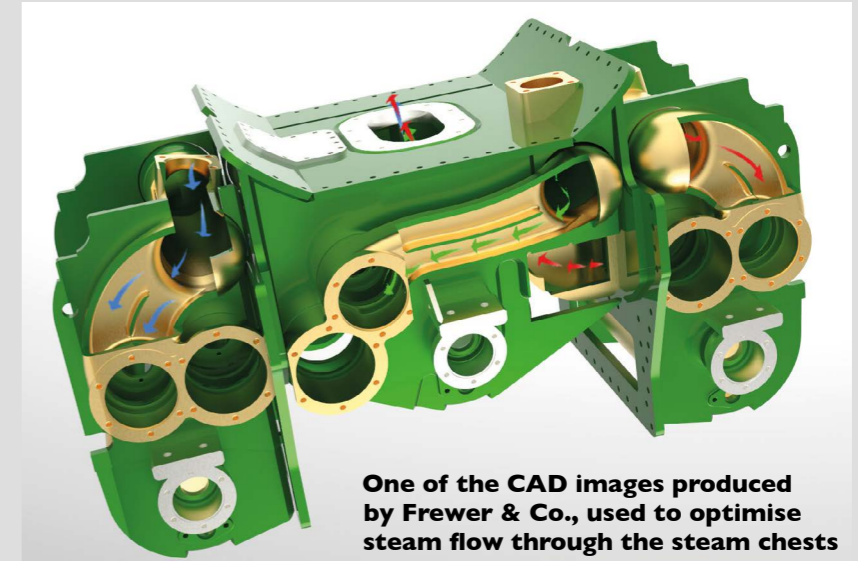
TCC



Ultimately, any component sponsored with a Dedicated Donation ends up like this, being fitted to No. 2007 by a member of our team.

FROM THE ARCHIVES *by Graham Langer*

Spring 2006 - With the expected arrival of the boiler in July 2006, efforts were being redirected between the frames to complete tasks which would be difficult with the boiler on the engine. To this end, I D Howitt Ltd had been contracted to make fixtures for, and to machine, the inside big end brasses. Installation was under way for the long 4" diameter steel pipe that carries exhaust steam from the inside cylinder casting back to the exhaust steam injector under the cab and a full-sized wood and cardboard model of an air pump has been made to enable us to decide where to mount the pumps and to design brackets to fit them to.

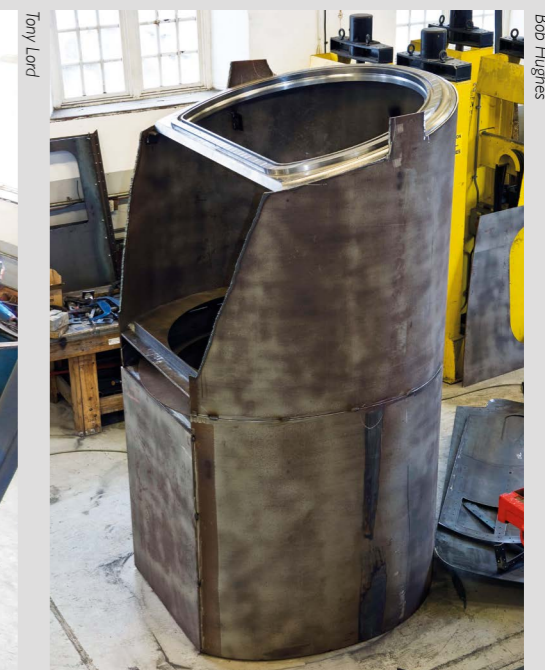


One of the CAD images produced by Frewer & Co., used to optimise steam flow through the steam chests and valves.

Spring 2011 – Boilers were once again in the news in 2011, *Tornado's* boiler had just returned from an overhaul at Meiningen to adjust the pattern of flexible stays and replacing original, flush stays with the more common protruding stay heads. The original type had been specified when we thought that the boiler would be oil-fired and were not ideal for coal-firing. With boiler out of the frames a huge amount of work had been carried out on the 'bottom end' at the National Railway Museum including the re-design and renewal of the grate and ashpan and improvements to the sanding gear. In addition to routine maintenance, Rob Morland designed and installed lighting between the frames to help servicing the locomotive.

Spring 2016 – With little of note to report about *Tornado*, TCC 42 focussed on the progress being made with No. 2007. The frames for the big Mikado now looked very impressive with increasing numbers of frame stays being fitted and a temporary 'cylinder block' stay in place, buffer beam and rear dragbox in place as well as some of the footplating. The smokebox has been assembled and at SDR(E) the smokebox door had been pressed using male and female press tools and a lot of heat! In other news, on 1st April the Trust announced it was to build a J38 0-6-0, No. 1416.....

Spring 2021 - Despite the difficulties of the pandemic, the P2 project continued to forge ahead, reaching the stage of fine-tuning the design for the cylinders and valve gear so that construction could be put out to tender. Frewer and Co. engineers undertook the Computational Fluid Dynamics [CFD] analysis of the cylinder block steam passageways. Meanwhile at Darlington Locomotive Works miles (literally!) of pipework and wiring were being fitted to the chassis. *Tornado* was still "confined to barracks" pending a return to the main line on 22nd May with 'The Pennine Explorer'. TCC



No. 2007's frames, Spring 2021 with temporary smokebox saddle stay and right, the welded smokebox.

The AI Steam Locomotive Trust is pleased to display the logos of organisations giving us their ongoing support. Their contribution is gratefully acknowledged.



The Gresley Society Trust



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Darlington Locomotive Works is normally open to the public on the first full weekend of each month (10:00hrs to 15:00hrs). Access to the works is in association with Head of Steam: Darlington Railway Museum where Covenantors are entitled to free entry (with Covenantor card). Charity registration No. 1022834. The Trust respectfully requests that anyone wanting to see *Tornado's* main line passenger trains follows the rules of the railway and only goes where permitted.

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