



**60163 TORNADO**  
New Steam for the Main Line



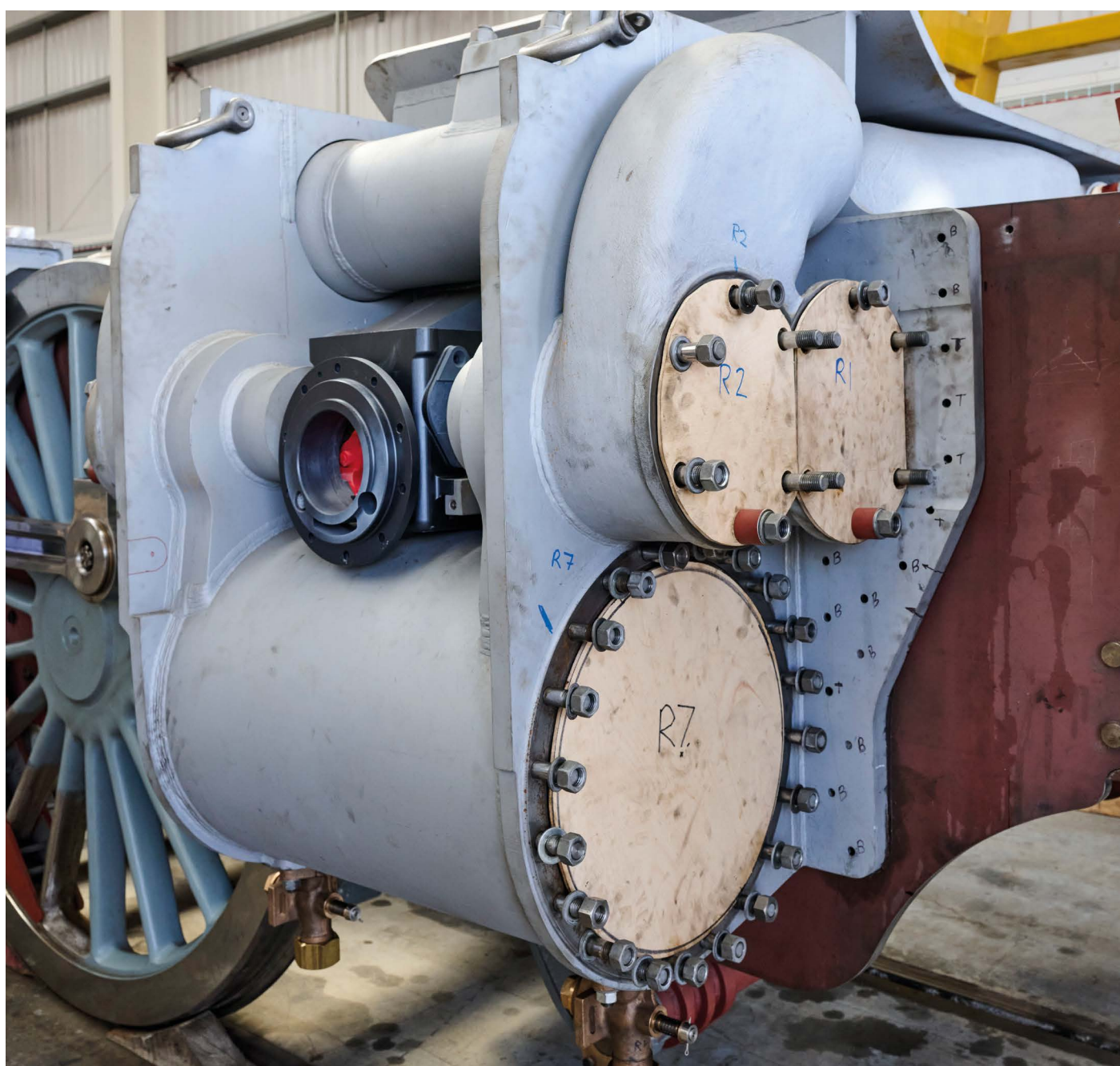
**2007 PRINCE OF WALES**  
Building Britain's Most Powerful Steam Locomotive



**3403 HIGHLANDER**  
Recreating Gresley's last design

# THE COMMUNICATION CORD

No. 79 Summer 2026



Another significant step towards realising David Elliott's dream, the monobloc sits snugly in No. 2007's frames.

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# EDITORIAL by Graham Langer



Welcome to another edition of *The Communication Cord*. Although you are likely to be reading this after the Trust's Annual Convention, production of this one preceded the event which will be covered in *TCC 80*. As some of you will be now know, the Trust team responsible for the fitment of European Train Control System technology to *Tornado* were 'Highly Commended' at the National Rail Awards (NRAs) in London on the 17<sup>th</sup> September. Recognising the world-first landmark, Rob Morland and Graeme Bunker-James were presented with their

certificate in front of over a thousand industry colleagues including Rail Minister Lord Peter Hendy. Our team was joined by colleagues from Hitachi, AtkinsRealis and Network Rail. To win such an accolade at the rail industry's Oscars is a major achievement. Steam locomotives don't normally feature with the focus usually on modern trains and recent innovations.

It has been a good summer for the Trust, although some criticism had been levelled at us for not planning more rail tours in the last few months, serendipity saw us able to continue operations on two preserved lines while most main line trains were cancelled or diesel-hauled due to the very hot weather; the move to the North Yorkshire Moors Railway following some welcome rain in the North, something southern counties had to wait several more weeks for. By the time *Tornado* moved to the Swanage Railway, normal steam operations had resumed. As I write this editorial, No. 60163 has just worked a hugely successful 'The Great Northern' tour for Vintage Trains and thus returned to Darlington in time for the Convention.

With *Tornado* running happily on the main line, the 'home team' in Darlington must turn their undivided attention to *Prince of Wales*, building on the success of fitting the monobloc to the frames. The last major challenge remains the valve gear and all our efforts both in terms of raising funds and assembling the various components must focus on getting this done as swiftly and efficiently as possible. We owe it to David Elliott to realise his vision in metal. Having the cylinder block in place has already allowed us to start setting the geometry of the slide bars and other valve gear parts and the sooner we have the camboxes in place the sooner we can start bolting everything up and attaching major building blocks such as the boiler and connecting rods.

It is not all necessarily going to be plain-sailing though and your financial support will be critical as we enter the home straight. Hopefully, as happened with *Tornado*, the final furlongs will be covered at racing pace as everyone sees the finishing post in sight. The challenges facing charities such as the Trust were recently highlighted by the Charities Aid Foundation, "Amid underlying pressures from the cost-of-living crisis, rising youth unemployment, geopolitical instability and growing climate concerns, charities and communities are not feeling the benefits of growth, and the business outlook remains cautious. Meanwhile, Britain's culture of giving is under strain with fewer people donating and volunteering. Against this backdrop, charitable giving by the FTSE 100 has fallen to a new low". The best ways you can help is to encourage a fellow enthusiast to join our ranks, talk the project up at every opportunity or find out if your employer would be interested in corporate giving.



**As we were preparing TCC 79, Tornado was visiting the Swanage Railway.**

Footnote: We have been asked why *Tornado* was sporting a 'Matey' headboard when hauling 'The Shap Mountaineer'. The train was running on the 10<sup>th</sup> anniversary of Ray Towell's passing and this was in his honour. **TCC**.

# FROM THE CHAIR by Steve Davies



By the time you read this edition of *TCC* our annual Convention will have hopefully reinvigorated those in

attendance with the quality and ambition of what we set out to achieve and which we broadly manage to accomplish. You will read in these pages of the many and varied projects being undertaken, with priorities often being adjusted to suit the availability of resources and the human capacity to deliver, but what will always remain at the top of the list is the delivery of a complete and fully functioning P2. This does not exclude other areas of activity (the successful operation of *Tornado* is essential) but when the team are faced with conflicting demands on their time it helps to understand that *Prince of Wales* is the default setting.

Money, as ever, continues to be central to all that we do, and at a time of national stringency I am grateful that our supporters remain as generous as they are, motivated and reassured, I hope, by the knowledge that your money is being spent wisely and efficiently. There are many impressive people, for example, exercising their brains to finalize the

design and construction of the P2's valve gear (the last major intellectual hurdle to be cleared on our way to completion) and visitors to the works might be forgiven for thinking that we are going backwards given that the wheels are now once again out of the frames. The latter operation is to allow final alignment of the cylinders with crank pins, axles etc, so please don't interpret images of a stripped-down engine as being anything other than positive! We may even take the opportunity to paint the frames while the wheels are out to save time

and hassle at the final construction phase. On the operational front, *Tornado* is now enjoying an efficient blend of heritage and mainline operations, quietly getting on with the job she was designed to do, and is on the cusp of a return to Scotland. More anon! Finally (he will not forgive me for highlighting this) please join me in wishing David Champion our very best wishes for a speedy recovery from his current ailment and we look forward to getting him back into *Tornado's* cab in the not too distant future.

**TCC**



**Moody and magnificent, Tornado near Selside on the Settle & Carlisle with 'The Great Northern'.**

David Kippax

# APPOINTMENT OF PAUL ROE

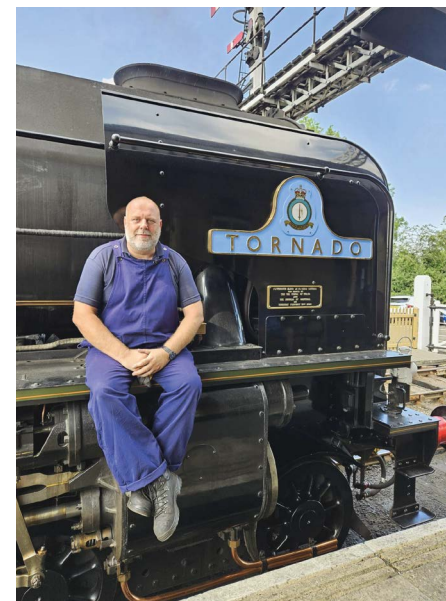
We are pleased to announce the appointment of Paul Roe as a Trustee of the charity and Operations Director. Paul joins the Board bringing extensive operational leadership experience together with a lifelong commitment to railway preservation. Paul served for more than 30 years as a police officer, including 12 years with the British Transport Police. Outside his professional career, he has volunteered at the Nene Valley Railway for almost 40 years, where he currently serves as Locomotive Department Manager and is a qualified steam driver.

As Operations Director, Paul will lead the Trust's Operations Team, ensuring the safe, efficient and successful delivery of *Tornado's* operations across the national network and preserved railways. Working closely with the Commercial Team, Engineering Team and Deputy Operations Director, Jorge Gorman, he will oversee operational planning, governance, budgets

and safety compliance, while also taking responsibility for the safe operation of Darlington Locomotive Works, supporting succession planning within the Operations Team, and as a Trustee contributing to the Trust's strategic direction. His appointment further strengthens the Trust's leadership team, continuing to deliver an increasingly demanding programme of operations for *Tornado*, support the construction of *Prince of Wales*, and develop the Trust for the future.

Paul Roe said, "I am honoured to be joining the A1 Steam Locomotive Trust as a Trustee and Operations Director. The Trust has earned a unique reputation within railway preservation through its professionalism, engineering excellence and the dedication of its volunteers and supporters. I look forward to working alongside such an experienced and committed team to ensure *Tornado* continues to operate safely and successfully,

while helping to support the Trust's ambitious plans for the future."



**Paul Roe.**

## TORNADO ON TOUR *by Jorge Gorman*

All photos Caroline Stearn



**Tornado at Darnholm, on 1<sup>st</sup> August, with the 11:35hrs Grosmont to Pickering Service.**

Following our visit to the East Lancashire Railway, *Tornado* returned to Darlington Locomotive Works as planned, for a short period of running maintenance. Whilst our engineering team carried this out, some of our dedicated support crew turned their attention to cleaning the locomotive, ensuring that every inch was polished for a special event close to home.

On Friday 15<sup>th</sup> May, we once again departed Darlington Locomotive Works, this time with a destination of Ruddington. Making the short journey through to the London end of Darlington station, we were pleased to be part of the station reopening celebrations, and propelled into the newly opened Platform 6 to welcome guests for footplate visits. After a few shunt movements to allow for planned photographs with LNER Azuma stock, we departed south, heading for our next intermediate stop, York. On arrival, we shunted onto the Railway Museum where A3 No. 60103 *Flying Scotsman* and support coach were waiting for our arrival. After quickly topping up with water, both locomotives were shunted, with our support coaches coupled together, and we departed in a double headed consist towards Ruddington. It was brilliant to see so many fans of both locomotives out to see us!



**Moorgates, with the 15:40hrs Grosmont to Pickering Service.**

En route, we made a brief stop at Toton, to attach a Class 66 to the rear of the consist, for the reversal move onto the GCR(N) just south of Loughborough. After being dragged along GCR(N) metals for a short distance, we uncoupled from the Class 66, and proceeded into Ruddington. We then undertook a successful period of operations on the railway, as well as period on static display. Following on from this heritage railway visit, we moved the short distance across from Ruddington to Wansford on the Nene Valley Railway, where we operated over two weekends, as well as further driver experience days. We also took the opportunity to a training day for support crew, to further enhance our commitment to learning and development within our team.

With notice of fire risk restrictions on the national network on the horizon, we departed Wansford briskly behind a class 66, for a late-night movement back to Darlington Locomotive Works. On arrival, our team carried out some further running maintenance tasks, including a boiler washout.



**Pickering Carriage Stable.**

Our attention then turned to our next operational commitments, with operations for our supporter's day in Darlington, and then the movement through to the NYMR. For the move to the NYMR, we were required to haul *Tornado* out of steam with a Class 66 leading the movement. Although for this type of movement, a number of engineering activities had to be undertaken, the locomotive arrived at Grosmont without issue, and once the engineering team had reassembled the temporarily removed motion, *Tornado* was moved to Newbridge yard to begin operations. We enjoyed a successful period of operations whilst on the NYMR, with the support crew also enjoying a summer 'holiday' to North Yorkshire.

## TORNADO ON TOUR by Huw Parker



Locomotive at Swanage in the loop awaiting next working.



Approaching Corfe Castle.

A slightly belated summary of the last few days of operations at the Swanage Railway – the last weekend being a change to the planned roster.

This change followed a lack of Driver Experience bookings and the last-minute cancellation of operations on Tuesday this week. The team spent some useful time cleaning and sorting out the coach and tidying up in the Tardis (the merchandise cupboard), Guard's Compartment and Workshop which look much better for the attention. We do need to invest in some rugged storage boxes for both the Tardis and the Workshop, which Jorge has in hand. Cheaper options are not cost effective as they do no last and damage easily! There are stock and spares on the coach that do not need to be dragged around the country and Ian tells me that once back at Darlington, there are plans to completely de-store the coach, identify what we have and then re-load only those items essential for routine operations. A great initiative.

Whilst at Swanage, the locomotive covered 464 miles covering the railway's gala, driver experience, service trains, a Wedding Belle, an Ashes-to-Ashes ceremony (which was also linked to a lovely AI bequest) and then a second unexpected weekend of operations. Apart from the lost Driver Experiences, I feel the "Tornado Effect" made for a very successful gala and second weekend of running which was good for the SR. The mileage has certainly helped ensure that the middle big end has well and truly settled down, climbing some reasonable gradients (I in 76 and I in 80) with some trains equivalent to load seven or eight coaches and and load 11 on one occasion. The locomotive performed well



Above: Alanna (Jorge's partner) with the sales stand on Swanage Platform.

Right: The sales stand with a big advert in front of us!



and has been well turned out throughout the visit with effort from our own Support Crews and Swanage Drivers, Firemen and Cleaners who were quickly roped in to help.

All in all, I think we can claim a very successful visit. Those who know will be able to confirm how financially successful it was but reputationally we have secured good friends at Swanage Railway, who would be pleased to see us back – they asked that we don't leave it as long (12 years since our last visit I think!)

After some routine repairs and adjustments by Ian, the locomotive and coach passed their FTR and made the move back to Tyesley in preparation for running 'The Great Northern'. **TCC**

## OFFICE NOTES by Jess Lamb



Over the summer the office staff and I have been super busy conversing with you lovely lot, ensuring the axles and cogs keep turning (not physically, obviously). Being the volunteer coordinator and overseeing events means that we have had the delight of being involved with a lot outside of the office walls of Darlington Locomotive Works.

Over the past few months we have helped gather and co-ordinate our amazing events volunteers, delivery of merchandise, leaflets, banners and everything else that is needed to make a stand successful like a military operation. After *Tornado's* amazing visit to the Great Central Railway in May, we have since had a stand and merchandise on sale at Nene Valley Railway in July and North Yorkshire Moors in August.

July 25<sup>th</sup> also saw our very popular Supporters' day which was a first for the entire office which we were very proud to have pulled off. We raised a lovely amount of money for Trust and were absolutely overjoyed that so many of you joined clubs and one gentleman who very generously covered the entire cost of our crane, being impressed by our workshop management. Richard Snowdon's savvy money handling ensured that not only can we get on with the building of the P2 but do can so at the lowest cost possible. The crane cost us two thousand pounds to purchase, after transport and testing totalling seven thousand pounds, a huge saving on a daily two-thousand-pound hire cost meaning it had already paid for itself by the time a kind sponsor came forward.

The generosity didn't stop there as we had our volunteers give up their value time to help the office staff make it work and a local company, Drinksmate, supplied us with 100 beer cups to our specifications and design to align wonderfully with the launch of the *Tornado* beer to celebrate her 18<sup>th</sup> birthday! The one thing we won't dwell on, for which I take full responsibility, is the 'tractor' wheels on the celebratory cake ... at least it gave a few of you a smile and tasted great!

At the time of writing this we have *Tornado* visiting Swanage Railway and four weekends of steam rides at Darlington Locomotive Works in our

calendar which will keep us enormously busy but we absolutely love seeing our local Covenantors come through and meeting new people to spread the word of the amazing work that is happening here. These events mean we get to meet you lovely supporters and put faces to names, it also meant that a lot of you got to meet our lovely new office staff member Zoe Anderson who got some absolutely wonderful feedback from quiet a few of you!

Zoe started with the Trust in June and has hit the ground running, she has been learning all of our systems and getting to know quite a lot of you, in addition to normal administration duties she has been focused on relaunching our Tornado Team which is the young members club for steam enthusiasts for ages five to seventeen. Zoe has split this into two groups of younger and older, created new leaflets and welcome badges, set in place for them to have their own summer and winter editions of newsletters and hopefully next year have their own mini convention. We are hoping that the numbers grow each year with the aim of ensuring the steam legacy continues and keeping the passion for our locomotives alive.

We are currently focused on getting

everything in order for the Convention on the 3<sup>rd</sup> of October, we are looking forward to seeing so many of you again, for those who haven't visited in a while or made it down to the Supporters' day you will be able to see our marvelous track being used for steam rides, *Tornado* in all her glory and some lovely new merchandise that the office has worked on. The office often reaches out to local suppliers to try and keep costs down (as with the *Tornado* cups mentioned above) and have managed to get twelve free brand-new full-length hosepipes! We are very grateful to fire and safety centre, Firechief Global and the Fire Brigade stores for these. We are currently trying to use all our persuasive powers to acquire a 21" swing lathe as dedicated donations for our machinery and their upkeep is crucial to keeping the overhead costs down and your donations being put towards the things you take enjoyment from!

On top of all the above the office continues to be present for all of your queries and visits, keeping the paperwork in order so it leaves the workshop to do the fun stuff that we want to see which is *Tornado* on the move and progress being made with *Prince of Wales*. **TCC**



Jorge Gorman and Zoe Anderson in the L&SWR coach at DLW.

TORNADO AT THE NENE VALLEY RAILWAY by Paul Roe



Two generations of East Coast power on display at Wansford Shed, Tornado keeps Deltic No. 55009 Alycidon company at the MPD.

No. 60163 *Tornado* once again undertook a hugely successful visit to the Nene Valley Railway in July this year, taking part in a fully packed and completely sold-out itinerary. The locomotive arrived at the railway in early July, ready for its first steamings on 3<sup>rd</sup> July. The day began with a lunchtime Fish & Chip Special, followed by afternoon Driving Experiences. On 4<sup>th</sup> and 5<sup>th</sup> July, *Tornado* operated passenger services, including another sold-out evening Fish & Chip train. The following week saw two further Driving Experience days on 9<sup>th</sup> and 10<sup>th</sup> July, before *Tornado* joined forces with its East Coast stablemate, Deltic No. 55009 *Alycidon*, for a fantastic weekend of pure East Coast action.

A special group of passengers joined us on Friday 7<sup>th</sup> August 2026. Over 100 serving personnel and their families, from RAF Leeming and RAF Fylingdales, were able to join us for a return trip from Pickering. Led by their Commanding Officer Group



The crowds turned out in huge numbers for the pairing of ECML giants.



Alycidon on the turntable road with No. 60163 on shed.

Captain John ‘Geordie’ Lawson they all had a fantastic journey and got to see the locomotive up close. Many of the children travelling also got to see the footplate. For the occasion, the driver was from the RAF and the fireman from the AI Steam Locomotive Trust. The evening of 9<sup>th</sup> July was also special, as the railway hosted the Peterborough RAF Cadets. The railway was effectively handed over to the cadets for the evening, giving them the opportunity to learn about the AI Pacific, how it operates and what is involved in running such a locomotive. The evening concluded with a round trip hauled by No. 60163 and an evening Fish & Chip supper. *Tornado* looked particularly resplendent with RAF flags proudly displayed on the middle lamp bracket for the occasion.

Throughout the visit, *Tornado* performed faultlessly, a testament to the dedication and professionalism of both the *Tornado* support crews and the Nene Valley Railway locomotive crews. The visit took place on the very edge of a period of high fire risk, and fortunately we escaped any lineside fires. This was helped considerably by the fire prevention equipment fitted to *Tornado*, including the ashpan arrangements and spark arrestor, as well as the significantly more sedate speeds at which the locomotive operates on a heritage railway, with a maximum permitted speed of 25mph.

As the hire period came to an end, word was received that a steam ban would come into force from midnight on Sunday 12<sup>th</sup> July. This resulted in plenty of telephone calls, planning and some careful shuffling of movements to ensure that *Tornado* and the support coach could leave the Nene Valley Railway and return to Darlington before the ban came into effect. Thanks to the efforts of many people, a movement path was arranged and No. 60163, together with the support coach, was towed out of the Nene Valley Railway and successfully arrived back in Darlington in good time.

*Tornado* remains a firm favourite at the Nene Valley Railway, and the visit once again demonstrated just how popular the locomotive is with visitors, railway enthusiasts and our own crews. We look forward to welcoming No. 60163 back to the Nene Valley Railway in the future — whether for another period of intensive running or perhaps even the occasional overnight stay between duties. A huge thank you goes to everyone involved in making the visit such a success. **TCC**

## • SHED NOTICES •

### Rex Mercer

We received the following letter from David Smith in Sheffield. "I thought that it might be worth getting in touch with the attached photo which shows Rex Mercer back in 2019 at Carlisle station following the journey from Sheffield which he fondly recalls. Rex was born in 1926 in May, so had his 100<sup>th</sup> birthday this year. He joined the LNER at Doncaster in 1941 as an ordinary apprentice on the same day as Peter Townend. He got to know Peter very well, similarly other personalities such as Dick Hardy and John Bellwood.

Two highlights of Rex's apprenticeship were fitting oil fired equipment to a WD 2-8-0 (circa 1946) and being involved in the design, casting and fitting of the 126mph plaques on *Mallard* in Spring 1948. Subsequently he worked on projects for L P Parker, then began career development toward becoming a shedmaster. This began at Woodford Halse followed by other sheds such as Copley Hill, Staveley, Colwick, Melton Constable, Ipswich, Plaistow and Boston before becoming Shedmaster at Doncaster in 1956. He regards AIs as reliable and needing less maintenance than other Pacifics, but they could be rough riding at high speed. This didn't deter him from firing them from King's Cross to Doncaster on 'The Yorkshire Pullman'.

Rex was head-hunted in 1960 to work in the steel industry, becoming a senior manager at English Steel, then Sheffield Polytechnic, manager of the Business School. His memories of the 1940/50s remain very clear and he finds the Peter Townend book on railway personalities particularly interesting. I hope that you find this interesting from one of the few surviving people who can recall the later years of the LNER. Kind regards David Smith, Sheffield



Rex Mercer, Carlisle.



### John Aldous

Alex Morton reports that on 25<sup>th</sup> May whilst at the GCR(N) in light steam, John Aldous, 82, visited *Tornado's* footplate. John was formerly a fireman on the Eastern Region (Grantham shed) and has past experience firing AIs, amongst other LNER/BR classes.

**Left: John Aldous puts a few rounds on the fire.**

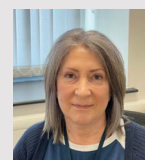
### No. 60154 Bon Accord at Newcastle Central Station

Regular contributor Michael Denholm has sent in this interesting photo of No. 60154 *Bon Accord* standing in Newcastle Central Station. Michael writes, "I photographed No. 60154 as a 17 year old lad at Newcastle on 24<sup>th</sup> July 1965. The locomotive had arrived with a Saturdays-only train from Manchester Victoria, the AI having been attached at Leeds, its home town, the 55H (Leeds Neville Hill) shed plate being clearly visible."

**Right: Bon Accord at Newcastle, 24<sup>th</sup> July, 1965.**



## Covenantors' Diary by Liz Slade



**Spring Supporters' Day** - The Trust celebrated *Tornado's* 18<sup>th</sup> anniversary in style in July, welcoming Covenantors and supporters to Darlington Locomotive Works for a special day marking 18 years since No. 60163 first moved under its own power.

With *Tornado* in steam, supporters were able to enjoy short trips up and down the site on the newly laid track, offering a unique opportunity to experience Britain's newest main line steam locomotive in action at the place where its story began. The day was a fitting celebration of the thousands of supporters, volunteers and suppliers whose contributions have helped bring *Tornado* to life and keep it running today.

### Driver Experiences at Darlington Locomotive Works

We are offering members of the supporters and public the chance to get behind the controls of *Tornado* with the launch of a new series of exclusive Driver Experiences at Darlington Locomotive Works from 5<sup>th</sup> October. Two participants will take turns to drive and fire *Tornado* under the supervision of her experienced footplate crew, travelling along part of the route of the original Stockton & Darlington Railway – the world's oldest public railway. It is a unique opportunity to experience the power of Britain's newest main line steam locomotive in the heart of the railway town where she was built.

The experience begins inside the Works, where participants and their families will receive a theory and safety briefing before being taken behind the scenes to see the workshop and *Prince of Wales* under construction. They will meet the Trust's staff and volunteers, whose combined knowledge of *Tornado*, *Prince of Wales* and the engineering and operation of steam locomotives is second to none – offering an insight into these remarkable machines that simply cannot be replicated elsewhere.

Following the workshop tour, participants will board *Tornado* and take turns driving and firing under supervision for around 40 minutes. Each participant will receive an AI Steam Locomotive Trust certificate and commemorative pin badge, while families are welcome to join the workshop and tour. Participants can also combine their experience with a visit to the wider Hopetown site before or afterwards.

The Driver Experience costs £450 per person, with two participants sharing the experience. Purchases can be made at [a1steam.com/driverexperience](http://a1steam.com/driverexperience)

**Raise a Glass to Tornado!** - Celebrate 18 years of No. 60163 *Tornado* in steam with a special commemorative beer created in honour of Britain's iconic new-build steam locomotive.

Brewed by The Engine Shed Brewing Company, this exclusive three-bottle pack celebrates the remarkable achievement of building *Tornado* and the dedication, craftsmanship and teamwork that have kept her steaming since completion in 2008. From her first official moves at Darlington Locomotive Works to her celebrated 100mph run, *Tornado* has continued to make history – and this beer is a fitting way to raise a glass to her story.

Above all, this commemorative ale celebrates the supporters who made it all possible. The loyalty and generosity of the Trust's Covenantors helped fund the



**Supporters gather round to witness the unveiling of the monobloc in position.**



**Left: David Champion does the honours and above a close up of Tornado's birthday cake!**

construction of *Tornado* and continue to support her operation and maintenance today. Every bottle is a reminder of what can be achieved when people come together behind an extraordinary project.

At 4.3% ABV, with three 500ml bottles in each pack, the *Tornado Ale* is a great addition to your collection or a thoughtful gift for a fellow steam enthusiast. Whether you enjoy it after a day beside the main line or raise a glass to *Tornado* at home, it is a chance to celebrate 18 years of an achievement that continues to inspire. Get your three-bottle pack today and raise a glass to *Tornado*! *Tornado Ale* – £16.50 for three bottles at <https://engineshedbrewery.com/product/tornado/> (Available to customers aged 18 and over). **TCC**



**Tornado Ale.**

RIDING TORNADO ON THE GCR by Ray Pettit

As a committed LMS fan, who has been ‘Duchess Daft’ since seeing *City of Nottingham* named before I was three, I always had great respect and regard for Arthur Peppercorn’s AIs. The disciples of Sir Nigel will turn in their graves, but I always worried about the conjugated gear which drove the middle cylinder on his engines. Now Peppercorn built a straightforward engine and a very good-looking machine too. Handsome is as handsome does and the AIs rapidly proved themselves in service alongside the A4s.

There was an apocryphal story which was told to me by a fellow member of the Caledonian Railway Association. The story concerns the three Haymarket AIs which spent time at Polmadie in 1951; Nos 60152, 60160 and 60161. All were in blue livery then and unnamed. A driver reported for duty on the ‘The Mid-Day Scot’ and his Duchess had failed its FTR. The shed foreman offered him an AI as there was nothing else on shed capable. The driver reluctantly took the AI on a promise that he could drop a note at Beattock box and swap the AI for an Upperby Duchess at Carlisle. The next time the fireman saw the driver was two days later and he asked how the driver managed with the Peppercorn engine. The response was “a cracking loc - good as a Big Lizzie!” Quite a plaudit from an ex Caley man! Just a pity that the AIs were all scrapped too early for the preservation movement to save one.

*Tornado* owes her existence to a great many volunteers and covenantors, but three people deserve special mention for their outstanding leadership: David Champion, the first Chairman of the AI Trust, David Elliott, who led design and engineering, and Mark Allatt, who led the commercial and publicity work.



Tornado’s first public steaming, Darlington August 2<sup>nd</sup> 2008.

Over the eighteen years from 1990 we all attended conventions in Darlington and watched the new engine take shape. I was there for the first public steaming



Joe, David, Nikki and the author.



Tornado at Ruddington Fields.

in August 2008, for the first train on the Great Central and for the first main-line run from York to Newcastle. *Tornado* has added a remarkable chapter to steam locomotive history as a new-build and set a standard now followed not only in the UK, but worldwide.

Yet until this May, I had never ridden behind her. My chance came when she visited Ruddington, not far from my home in Long Eaton. Graham Langer kindly put me in touch with Jorge Gorman, who was managing the locomotive on the GCR(N), and I arrived for the 13:00hrs departure from Ruddington Fields on 18<sup>th</sup> May. It was a warm, sunny day, with temperatures nearing 80°F. *Tornado* had already made a preparatory trip up the line that morning, and we arrived at the station at the same time. It may not have been quite as dramatic as it sounds, but No. 60163 rolled down the middle road and gently reversed onto her nine-coach train. The crew were Great Central Railway men: David driving, Joe firing, and a lady stoker, Nikki, wearing an AI T-shirt. Nikki is an

AI Trust volunteer and she works for the DB Cargo UK Breakdown and Recovery team at Toton and is clearly every bit as enthusiastic about steam locomotives as I am. She also lives locally, which became relevant later.

Joe commented that the coal provided was good – slow burning and ‘clean’ and he fired in a horseshoe around the ‘box. We eventually left Fields station at least ten minutes late because a coach party had not arrived on time, and we set off with the Class 20 at the rear leading, so we were in reverse going towards the main line. Having once lived locally in Clifton, about two miles from Ruddington, I remember when this area was a Ministry of Supply vehicle disposal depot, so it is pleasing to see it now serving the community as a Country Park.

We waved to families in the park as *Tornado*’s wheels squealed around the sharp curve to the north and came to a halt just beyond the facing points. Joe then took a large key from the tender locker and went to change the points

using the ground frame. David set the locomotive in full gear, checked behind, gave a short whistle, and we were off. He opened the regulator, then briefly closed it after the first chuff before easing it open again as *Tornado* began to move. After three chuffs—half a revolution of the driving wheels—he opened up more as the engine took hold of the train. The cut-off was then shortened slightly and David opened up the regulator. The exhaust from the front-end sharpened and *Tornado* settled down to lovely even 6/8 time beat of a three-cylinder engine. She rode well, although I suspect the old bullhead track on the northern section is not as stable or level as a former BR main line. Joe’s careful firing kept the boiler pressure at around 230psi and and we maintained a steady pace along

the straight across Gotham Moor up the gentle rise to Rushcliffe Halt. Officially this was a photo stop, but it also allowed some movement of stewards between the coaches. We made another careful start, but the gradient steepened slightly towards East Leake and *Tornado*’s exhaust became more pronounced. East Leake station had an island platform (typical of the Great Central) and travelling south on the old up line. We then passed through the tunnel under Rempstone Road, over the hill and rolled down to the River Soar water meadows on a very light regulator. Soon we were alongside Falcon Works, the former Brush premises where I began my graduate apprenticeship in 1963. Happy days—I learned a great deal there.

On the return, the Class 20 led until we

reached Ruddington ground frame, after which *Tornado* had the pleasure of hauling the train back into the platform. It was a wonderful trip from start to finish, with an excellent crew. As Nikki lives in Derby, I have sent her details of the Derby Railway Engineering Society. We meet monthly during the winter for lectures on a wide range of railway engineering subjects and also run a mentoring scheme for young engineers. The lectures are available on Zoom, so you do not need to live in Derby to benefit from membership. If you are interested, please visit [www.dres.org.uk](http://www.dres.org.uk) or contact the author on 07788 298884.

Thank you to Graham Langer, Jorge Gorman and the Great Central staff for an excellent afternoon! **TCC**

RAILTOURS Sophie Bunker-James

‘The Cathedral’s Express’ to Edinburgh – behind *Tornado*.

On Saturday 14<sup>th</sup> November, No. 60163 *Tornado* will head north once again as it takes to the East Coast Main Line for a special journey to Edinburgh with Vintage Trains. ‘The Cathedral’s Express’ will travel from the East Midlands to the Scottish capital, with *Tornado* taking over at Darlington for the spectacular run north. From there, passengers can enjoy the beautiful coastal stretch of the East Coast Main Line, travelling through some of the most memorable scenery on the route before arriving in Edinburgh.



N Whicker



Edinburgh skyline - castle in background, Balmoral Hotel and Waverley Station and clock tower in foreground.

The train will be available to join at Coleshill Parkway, Tamworth, Burton-on-Trent, Derby, Chesterfield, York and Darlington, making this a great opportunity to experience *Tornado* in action on the main line while enjoying a full day out in Edinburgh.

Whether you’re a long-standing *Tornado* supporter or simply want to experience the sight and sound of a modern main-line steam locomotive at work, this is a journey not to be missed. Book your place on ‘The Cathedral’s Express’ today and join *Tornado* for the journey to Edinburgh.

Tickets and further information available at [www.a1steam.com/steamtrains](http://www.a1steam.com/steamtrains) **TCC**



**Tornado, coupled to a L&SWR non-corridor brake coach supplied by the Bluebell Railway, provides rides at Darlington Locomotive Works.**

## AI PROFILE – No. 60150 WILLBROOK by Phil Champion

**No. 60150 was built Darlington in June 1949, Works No. 2069 fitted with Diagram 118 boiler No. 3968, and initially turned out in apple green with 'BRITISH RAILWAYS' in Gill Sans on the flush-rivetted tender. The locomotive was first allocated on 15<sup>th</sup> June 1949 to Heaton, one of four Peppercorn AIs originally based there. Surprisingly, after just a short while in traffic, it visited Darlington Works for an unclassified repair, arriving 9<sup>th</sup> July 1949 and departing on 14<sup>th</sup> of the same month.**



Peter Townend

**Willbrook passes through Doncaster on 8<sup>th</sup> January 1953.**

Willbrook was reallocated to Gateshead from 10<sup>th</sup> July 1949, one of two AIs moved there at that point, the other being No. 60129 *Guy Mannering*. Early duties on named trains included 'The Norseman' on 30<sup>th</sup> July and the start of a long association with 'The Night Scotsman' on the 29<sup>th</sup> of that month but it was also recorded on the down 'Yorkshire Pullman' on 29<sup>th</sup> September. A brief visit to Darlington Works for an unclassified repair between 31<sup>st</sup> October 1949 to 2<sup>nd</sup> November 1949 saw the locomotive return to traffic only to fail at Barkston on 21<sup>st</sup> June having run the middle big end hot (lubrication to this component was upgraded from the original design) followed by a further failure on 8<sup>th</sup> August before a 'Heavy Intermediate' at Doncaster Works between 12<sup>th</sup> December 1950 to 12<sup>th</sup> January 1951. No. 60150

emerged from 'The Plant' with the name *Willbrook* after the 1914 winner of the Doncaster Cup, an Irish bred horse owned by Mr. J. Bryan, and carrying BR express passenger blue livery. The locomotive probably lost the Flaman speed recorder and gained the lipped chimney at this point as well.

A regular turn during 1951 was the up 'Flying Scotsman', Willbrook seems to have been something of a favourite for this duty at that time, handling the train dozens of times during the year; however, it was not all glamour jobs during this period, the locomotive was also recorded on freight trains on 19<sup>th</sup> July (at Loughborough) and an up fast freight there on 17<sup>th</sup> September. After a short period carrying BR express passenger blue, a works visit to Doncaster for a 'General' overhaul from 25<sup>th</sup> February

1952 to 26<sup>th</sup> March saw No. 60150 fitted with boiler number 29873 (Diagram 118) and turned out in lined BR green with the early emblem. In this condition the locomotive returned to traffic on the East Coast Main Line and named trains included the up 'Queen of Scots' from Newcastle on 17<sup>th</sup> February 1953, the up 'Flying Scotsman' on 28<sup>th</sup> of the same month and the down 'Aberdonian' on 4<sup>th</sup> April, it was noted heading south through Doncaster on a passenger train on 1<sup>st</sup> August 1953 before a further 'General' at Doncaster (19<sup>th</sup> August 1953 to 28<sup>th</sup> September), leaving with boiler number 29861 (Diagram 118)

Although No. 60150 handled and lot of 'Night Scotsman' turns at the end of the year and the start of 1954, work hence followed a pattern

set by Gateshead which used its roller-bearing AIs Nos. 60154 and 60155 for the 'Night Scotsman', *Willbrook* and No. 60151 *Midlothian* only getting a look-in once a fortnight when the former pair enjoyed a 'shed day'. Other Gateshead turns which *Willbrook* handled included the up 'Flying Scotsman' on 10<sup>th</sup> April that year, the train composed mainly of Thompson stock and taking 'The North Briton' (09:30hrs York – Edinburgh) forward from Newcastle on 12<sup>th</sup> June, leaving from Platform 10, indicating that it had arrived over the High Level Bridge and reversed here; this train was formed of BR Mk1 stock in carmine & cream. No. 60150 was again recorded with 'The Tees-Tyne Pullman' on 2<sup>nd</sup> July, both up and down 'Night Scotsman' on 23<sup>rd</sup> July and, more notably, handling a diverted East Coast train over the Waverley Route on 7<sup>th</sup> September.

*Willbrook* visited Doncaster Works for a 'General' from 14<sup>th</sup> January 1955 to 11<sup>th</sup> February, leaving with boiler number 29870 (Diagram 118). No. 60150 seems to have handled more than its fair share of 'Night Scotsman' trains in the first half of the year, the end of April seeing the locomotive working turn and turn-about on the 25<sup>th</sup>, 27<sup>th</sup> and 29<sup>th</sup> taking three trains a day, for instance on the last two of those dates it worked the up 'Night Scotsman', the down 'Heart of Midlothian' and the down 'Night Scotsman'. Whether this all proved too much is open to debate but the engine was noted on Gateshead Shed under repair on 21<sup>st</sup> May. The diet of passenger, parcels and freight trains continued for the rest of the year as well as some visits to other sheds being noted on Haymarket shed on 21<sup>st</sup> August and at Peterborough on 26<sup>th</sup> November the same year. Doncaster called again between 14<sup>th</sup> June 1956 to 4<sup>th</sup> August for another 'General', this time seeing No. 60150 being fitted with boiler number 29842 (Diagram 118). From September 1956 until the arrival of the diesels, Gateshead AIs often worked to Grantham with the up 'Flying Scotsman' and 'Heart of Midlothian', also handling the up 'Aberdonian' as far as Peterborough, No. 60150 taking her share of these duties. After a busy conclusion to 1957, again handling a large number of 'Night Scotsman' turns another 'General' at Doncaster Works from 1<sup>st</sup> February 1958 to 6<sup>th</sup> March, saw the locomotive out-shopped with boiler number 29813 (Diagram 118). Notable trains during 1958 again included 'The Tees-Tyne Pullman', 'The Aberdonian' and numerous 'Scotsman' diagrams although an outing on the up sleeper car express ended in failure at Hatfield, Class V2 No. 60916 taking the train forward. Having been observed on



**On an unrecorded date, *Willbrook* is seen at York in final condition, note the Diagram 117 boiler.**

a Northbound passenger train at York, 20<sup>th</sup> May 1959, *Willbrook* emerged from Doncaster Works on 16<sup>th</sup> September, fitted with boiler number 29822 (Diagram 118). 1960 added a new named train to the roster, 'The Tynesider', which the locomotive was given charge of on several times in January.

No. 60150 was reallocated to York on 26<sup>th</sup> November 1960, passing through Doncaster Works for its last 'Heavy General' from 5<sup>th</sup> July 1961 to 18<sup>th</sup> August and receiving its final boiler number 29782 (a Diagram 117, with the banjo dome a little further forward), trains of note following its return to traffic included a King's Cross to Perth sleeper on 29<sup>th</sup> August and the up 'Queen of Scots' the next day. No. 60150 was seen towing failed diesel No. D5828 and its empty coaching stock on 3<sup>rd</sup> January 1962 although its next visit there was for a 'Light Casual' between 19<sup>th</sup> March 1962 to the 27<sup>th</sup> of the same month. Later that year the locomotive was seen taking a van train out of Portobello Lane Goods Yard, Sunderland bound for York Dringhouses Yard on 19<sup>th</sup> June 1962 and noted waiting at Grantham with a northbound express on the 24<sup>th</sup> December 1962. Parcels, mail and sleeper trains were among the mix at the start of 1963, a more unusual turn on 16<sup>th</sup> February being the down Shell tanks into Newcastle but by 11<sup>th</sup> May the locomotive was stopped at York Shed for repairs. Freight trains, however, began to form an increasing part of *Willbrook's* work, on 8<sup>th</sup> June 1963 No. 60150 was recorded with southbound vans through Newcastle station and on 2<sup>nd</sup> October 1963 none other than H.C Casserley photographed the locomotive on York shed. There



**No. 60150 at Doncaster MPD on 4<sup>th</sup> April 1964.**

followed a final visit to Darlington Works for a 'Light Casual' from 30<sup>th</sup> January 1964 to 5<sup>th</sup> February and by 4<sup>th</sup> April 1964 it was to be found on shed at Doncaster. *Willbrook* was noted on shed at York on 11<sup>th</sup> April 1964 in the company of its former Gateshead stablemate No. 60155 *Borderer*, V2 No. 60282 and BI No. 61021 and was back there on May 2<sup>nd</sup> with fellow AI No. 60120 *Kittiwake*, sharing one of the York roundhouses with Gresley V2 2-6-2 No. 60928 and Thompson BI 4-6-0 No. 61049. Alas, the end was nigh and after final records showing No. 60150 heading south through York on a passenger train on 1<sup>st</sup> August 1964 in filthy condition and out of traffic on York shed from 5<sup>th</sup> August, *Willbrook* was withdrawn on 5<sup>th</sup> October 1964 and sold to A. Draper, Hull, in December 1964 having carried eight different boilers, the final one being a Diagram 117 design.

*This history was compiled by Phil Champion based on a database compiled by Tommy Knox and with reference to the RCTS book 'Locomotives of the LNER Part 2A' as background and updated by Graham Langer in 2020* **TCC**

Bill Reed

Nigel Kendall

## P2 ENGINEERING UPDATE *by Terry Graham*

The P2 project has achieved a significant milestone with the successful installation of the locomotive's cylinder block in the frames, marking an important step. The achievement follows months of planning, preparation and precision engineering. Extensive fitting and alignment work has already been carried out, with early indications suggesting that the installation has been highly successful.

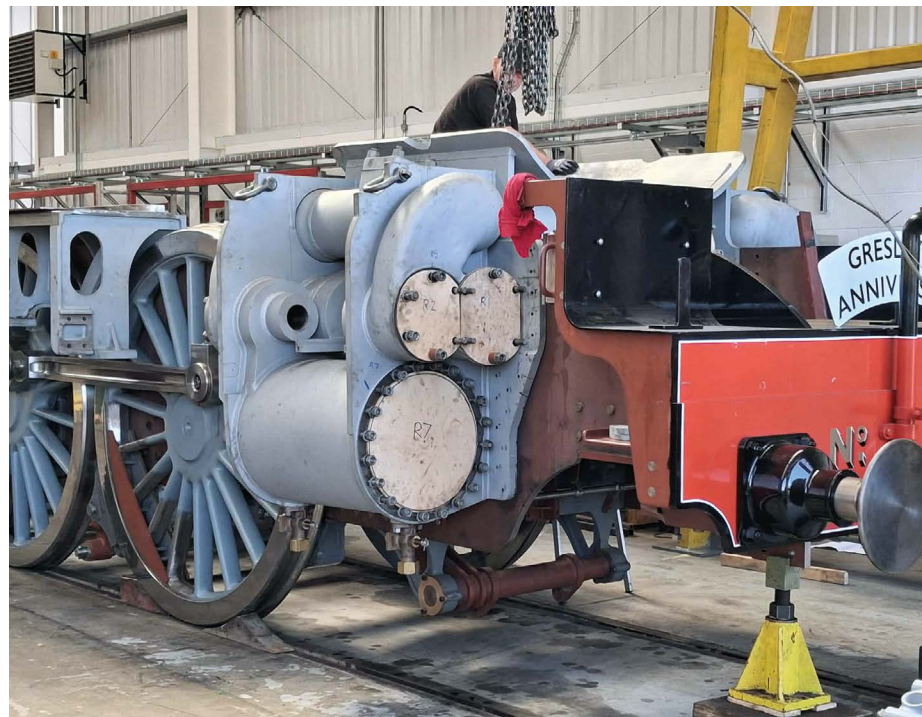


The monobloc sits comfortably between the P2's frames.

### Monobloc

Installing the cylinder block was far from a straightforward operation. Over four days, the component was removed and reinstalled around twenty times as the engineering team carried out meticulous checks to ensure a perfect fit within the locomotive's frames. A key contributor to the success of this work has been the Trust's recently commissioned overhead crane. The investment has already demonstrated its value, enabling the team to handle large components safely and efficiently. The crane is now fully certified and registered with British Engineering Services, with its next inspection scheduled for July 2027.

With the cylinder block now in position, attention has turned to the next critical phase. The coupling rods have been removed and the locomotive supported on Matterson jacks to allow the driving wheels to be taken out. This will enable



engineers to carry out detailed checks on the alignment between the cylinders and the main driving axle. Support for the process has been provided by Darin Crone and Richard Swales from the Sir Nigel Gresley Locomotive Preservation Trust, who have shared specialist expertise and equipment to assist with the measurements.

If these checks confirm the positive initial results, work can progress on several major activities, including completion of the driving wheel cannon boxes, refitting of the coupling rods, finalisation of sidebar designs and the commencement of sidebar forgings to allow the connecting rods to be fitted.



With the cylinder block in place work can start on final alignment of the valve gear.



As with any major engineering project, the next stage has revealed some technical challenges that are now being addressed. One issue concerns the middle cylinder valve cover, which originates from the original P2 design. During assembly it became clear that the component interferes with a frame stretcher. Engineers are now working with Alan Parkin and Graham Nicholas to develop a revised solution that will be reviewed with Ricardo before implementation.

## Valve gear

The associated Lentz/Franklin/Elliott valve drive mechanism also requires further design work. This has become a priority as mounting arrangements need to be incorporated into the cylinder block before it is permanently secured in place. Completing this work now will avoid significantly more complex modifications later in the build programme.

The 3D-printed components are proving invaluable in developing and refining the P2's valve gear, allowing the engineering team to assemble the system at full scale, check how the individual components interact and identify any necessary refinements before committing to the more expensive final metal components. The latest work has seen the cam box assembled and installed in the cylinder block, providing an opportunity to examine the operation of the cams, rockers and reversing mechanism as a complete system.

The project team has also been reviewing the design of the locomotive's cam box. Discussions involving pattern makers, foundries and machining specialists have highlighted difficulties with manufacturing the current design as a casting. In response, engineers are exploring a redesigned fabricated structure, following the same successful approach previously adopted for the cylinder block itself. The change could simplify manufacture, reduce risk and provide greater flexibility in sourcing suppliers. Work is continuing towards placing orders for the gearbox and cam box lid castings.



One of the printed 'double beat' valves is offered up to the block.

## Draw gear

The team at Darlington Locomotive Works completed the fabrication and assembly of the locomotive's front draw gear. With the draw gear now in place, the P2 can be safely coupled and moved around the works using a shunting locomotive or, perhaps more fittingly, by *Tornado* herself. While it may seem a modest component, the draw gear is fundamental to the locomotive's operation, providing the vital connection that allows it to be hauled, shunted and, in time, take its place at the head of its own trains.

## Pony truck cannon box

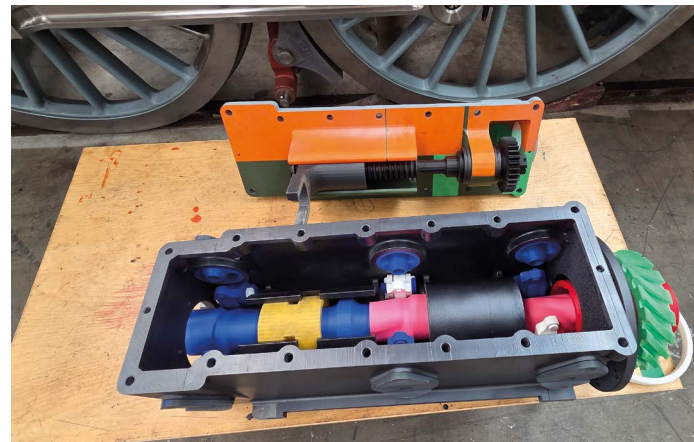
Attention is also being given to the pony truck cannon box. Discussions are underway with Alan Lusby of the B17 project regarding possible modifications to existing patterns that could support the production of a replacement component. A final decision will be based on achieving the most effective balance between cost, reliability and long-term performance.



Fabrication of the grate bars under way.

## Raising Steam Fund

While the main focus remains on critical-path engineering work, progress continues through the Raising Steam Fund programme. Grate castings have already been ordered and delivered, while procurement of 128 small grate bars has been temporarily deferred as alternative fabricated designs are investigated. Trial fabricated grate bars are expected to undergo testing on *Tornado* before any wider commitment is made. Quotations are also being sought for trunnion bars, safety valves and a range of other components identified within the fund's programme.



Above images : The cambox and its associated lid.



The locomotive's immaculately polished drawhook in place in the front buffer beam.

## Investing in Capability

Alongside locomotive construction, the Trust continues to strengthen its engineering capabilities. A milling machine has recently been received from Beamish Museum and is expected to be assessed and repaired with volunteer support. In addition, the National Railway Museum has offered the Trust a lathe and cylindrical grinder, providing an opportunity to expand in-house machining capacity at relatively modest cost.

These additions have the potential to reduce dependence on subcontractors and create long-term savings while supporting future locomotive maintenance and overhaul activities.

The Trust is also evaluating the potential acquisition of SolidWorks software licences, associated hardware and training. Improving digital engineering capability could further enhance design efficiency and provide valuable support for future projects.

## Looking Ahead

Despite a number of technical challenges still to be resolved, the overall picture remains extremely positive. The successful installation of the cylinder block represents one of the most significant milestones achieved to date and demonstrates the steady progress being made towards bringing the new P2 locomotive closer to completion. The coming months will focus on confirming cylinder alignment, finalising key design elements and progressing major component manufacture. With new workshop equipment, growing engineering capability and a clear programme of work ahead, the project continues to move confidently towards its next stage of assembly. The P2 project remains firmly on track, with substantial engineering progress achieved and a clear path established for the next phase of this remarkable locomotive's construction. **TCC**

## TRUST AMBASSADORS - Becoming the Public Face of Steam's Future

### Inside the Role of an AI Steam Locomotive Trust Ambassador

The AI Steam Locomotive Trust occupies a unique place in Britain's railway heritage. With a clear mission to build, operate, and maintain new main line steam locomotives, the Trust combines engineering ambition with public engagement. Achieving that vision requires more than skilled work at Darlington Locomotive Works. It also depends on passionate people who can share the Trust's story and connect it with communities around the country. That is where the Trust Ambassador comes in.

**A Regional Voice for a National Mission** - Trust Ambassadors are the AISLT's representatives on the ground. Working closely with Directors and the Darlington team, they act as the public face of the Trust within their region, helping ensure that every encounter with AISLT leaves a positive and lasting impression. As volunteers, Ambassadors raise awareness of the Trust's work, support fundraising and membership growth, and help turn engineering achievements into stories that inspire. Through conversations, public speaking, events, and online engagement, they build enthusiasm for the future of steam.

**Making a Difference** - While attending events and acting as a local point of contact are important parts of the role, Ambassadors are encouraged to use their initiative and seize opportunities to promote the Trust wherever they arise. When an AISLT locomotive visits their area, Ambassadors help welcome supporters, engage newcomers, and maximise the impact of the occasion. Working alongside Volunteer Managers, they also help recruit and coordinate volunteers, strengthening the Trust's local presence.

**The Skills That Matter** - Successful Ambassadors are good communicators who can share the Trust's story with confidence while listening to supporters and stakeholders. They are relationship-builders, comfortable networking with volunteers, donors, railway enthusiasts, and local organisations. Adaptability, creativity, and a positive attitude are valuable qualities, as is confidence in using social media and digital platforms to extend the Trust's reach. Above all, Ambassadors are reliable representatives who reflect the Trust's values and follow through on their commitments.

**A Role Driven by Passion** - The most important qualification is enthusiasm. Ambassadors believe in the relevance of main line steam today and are motivated to help secure its future. They enjoy engaging with people, can capture an audience's attention, and want to contribute to one of Britain's most remarkable railway projects. For the right people, becoming an AISLT Trust Ambassador is more than a volunteer role. It is an opportunity to help tell the story of steam's future.

**If This Is You...** If you feel you could contribute, please get in touch. Email [richard.courteney-harris@aisteam.com](mailto:richard.courteney-harris@aisteam.com) for a more detailed role description, and we can arrange an informal conversation about what the role involves.

A final thought: very few people will possess every quality listed above. If you have some of the attributes and a desire to get involved, we'd still love to hear from you. Enthusiasm and commitment matter most. **TCC**



**The AI Steam Locomotive Trust is delighted to announce that David Fletcher of Melbourne, has accepted the role of Trust Ambassador in Australia. David may be known to some of you as a superb draftsman of late 19<sup>th</sup> Century American and British steam locomotives and is extremely well-connected in the steam scene 'down under'. We will carry a fuller profile in TCC 80. He is seen here in the cab of a Baldwin 2-6-2 on the Brecon Mountain Railway.**

# P2 FUNDRAISING by Sophie Bunker-James

## Your Support Is Building Prince of Wales

The construction of No. 2007 Prince of Wales is moving forward, and behind every engineering milestone is the generosity of our supporters. From ordering the fire grate for the new boiler, to testing the ADA clutch and raising more than £100,000 towards the unique valve gear, your donations are paying for the components and development work that are bringing the P2 closer to completion. We are incredibly grateful to everyone who has contributed so far. But with around £2 million still needed to complete No. 2007, there is much more to do. The encouraging news is that every time we reach a fundraising target, we can commit to the next piece of work — turning money raised into components ordered, tests undertaken and construction completed.

### Raising Steam

Our Raising Steam Club has continued to gather momentum, with 65 supporters now signed up, taking us well beyond halfway towards our target of 100 members.

The campaign has already delivered some important results. The boiler pressure gauge and steam chest pressure gauge have now been delivered, and as soon as the first £20,000 was raised, we were able to place the order for the fire grate — the single biggest component still missing from the boiler.

That is exactly what the Raising Steam Club was created to achieve: targeted fundraising that allows us to buy the components needed to take the boiler through to its steam test.

With 65 members now signed up, we are well on our way — but we still need more supporters to reach the £50,000 target. If you have not yet joined the Raising Steam Club, there is still time to help fund the work that will ultimately see the P2's boiler tested under steam.

visit:  
[www.a1steam.com/raisingsteam](http://www.a1steam.com/raisingsteam)  
or scan QR code  
for more information  
and to support this project.



### Valve Gear: Over £100,000 Raised

The Valve Gear Club has now passed the £100,000 mark, a fantastic achievement and one which is giving real momentum to this major part of the P2's construction. The recent fitting of the monobloc into the frames has provided an important reference point for the valve gear work, while the full-size 3D-printed components have been tested for size and fit. With these checks progressing, discussions are now moving forward towards casting the first cambox.

The fundraising target for the Valve Gear Club remains £300,000, so there is still a long way to go. But surpassing £100,000 demonstrates what can be achieved when supporters get behind a specific part of the project.

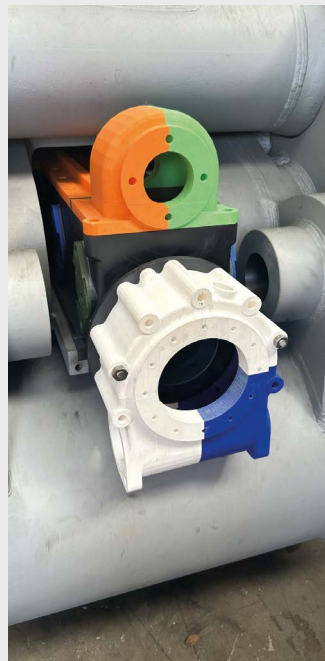
visit:  
[www.a1steam.com/p2valvegear](http://www.a1steam.com/p2valvegear)  
or scan QR code  
for more information  
and to support this project.



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



One of a pair of 320psi pressure gauges acquired for No. 2007.



Cambox and gearbox 3D-printed components now tested.

### ADA Clutch Trial: Thank You, and One More Needed

The ADA Clutch Trial and Design Project has also reached an important fundraising milestone, with the club now surpassing its original target. A huge thank you to everyone who donated and helped us reach that goal. The prototype ADA clutch was load tested at Darlington Locomotive Works at the start of September, and we are now looking towards fitting it to Tornado's tender for testing later this month. This testing will provide valuable evidence as the design progresses towards certification.

And there is still another opportunity to help. Just £8,000 more will fund the second ADA unit required for Prince of Wales. Once the design has been certified, construction of this unit can begin, providing another important component for the P2. If you supported the original ADA campaign, thank you — and if you would like to help take the project through to the next stage, a further donation would make a direct contribution to completing the equipment needed for Prince of Wales.

Visit:  
[a1steam.co.uk/p2ada](http://a1steam.co.uk/p2ada)  
or scan QR code  
for more information  
and to support this project.



### Keeping Your Regular Support Growing -

Alongside these individual fundraising campaigns, we are incredibly grateful to the Covenantors who provide a regular income of around £10,000 every month to support the P2 project. That dependable income is hugely important. It allows us to plan ahead, commit to expenditure and keep work moving between the larger fundraising campaigns. Over many years, Covenantors have provided a reliable foundation for the construction of Prince of Wales, and we cannot thank you enough for that commitment.

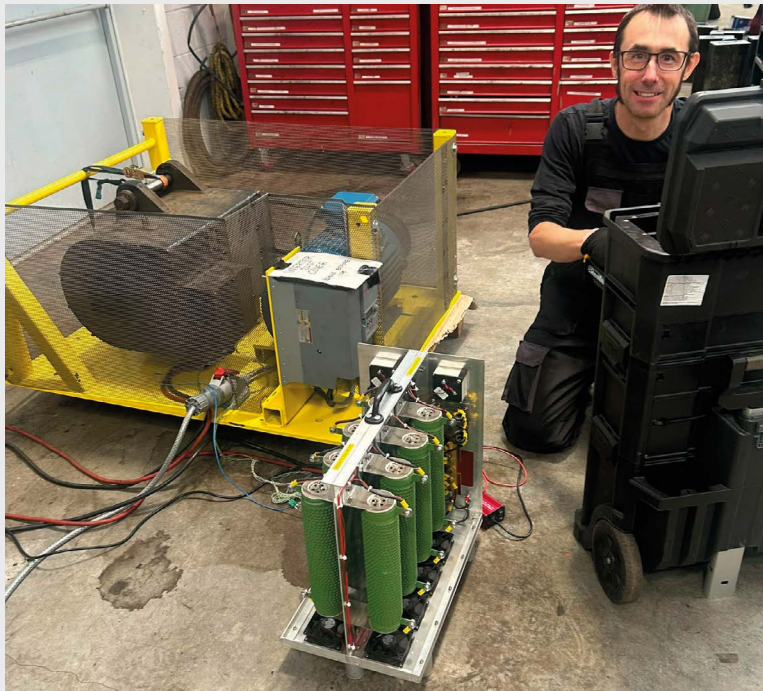
However, like everything else, the cost of building a new steam locomotive has increased over time. If you are already a Covenantor, please consider increasing your monthly donation, even by a small amount, to help us offset inflation and maintain the value of your support.

An extra £2, £5 or £10 a month might not seem significant on its own, but collectively these increases could make a substantial difference to the funds available for the P2's construction.

And if you know someone who is interested in the P2 project but is not yet a Covenantor, invite them to get involved - now is a great time to join and become part of the regular support that is helping to keep Prince of Wales moving forward.

### Thank You, and Keep the P2 Moving

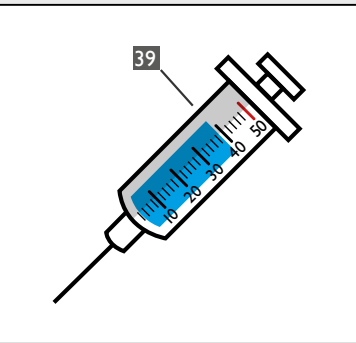
The last few months have shown just how closely fundraising and engineering progress are linked. Raise the money, and we can place the order. Complete the design work, and we can test it. Prove the design, and we can manufacture the next component.



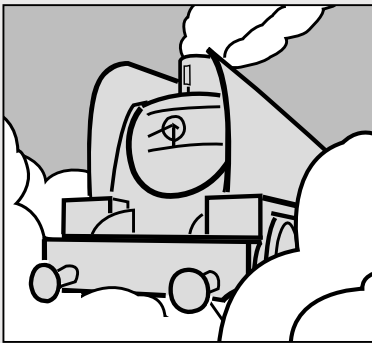
Alan Parkin sets up the test rig at DLW.

Thank you to everyone who has helped us reach these milestones — whether through a regular Covenantor donation, a one-off contribution, a fundraising club or a donation towards a specific component.

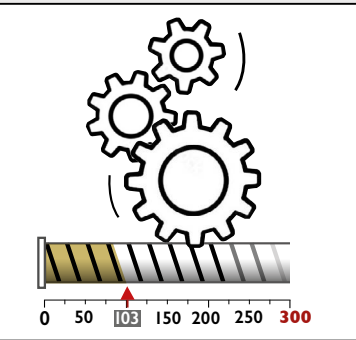
There is still a great deal of work ahead, but every contribution helps us pay for the next component, the next test and the next stage of construction. Please continue to support Prince of Wales and help us keep the project moving towards completion.



Injectors Club - 39 supporters.



Raising Steam Club - 65 supporters, (target - 100).



Valve Gear Club - 103 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](http://www.p2steam.com/support/regular-donations) for more information. **TCC**

## P2 SINGLE MALT WHISKY

### An Exclusive First for P2 Supporters

For years, supporters have helped build No. 2007 *Prince of Wales* for little more than the price of a pint of beer each week. Every covenant, every donation and every purchase has brought Britain's most powerful steam locomotive ever built closer to reality.

Today, we're delighted to offer a very special way to become part of the story. Introducing the Limited Edition P2 Whisky - Drawn from a single cask at Glen Garioch Distillery, near Aberdeen on the route once traversed by the original P2 locomotives, this exceptional whisky is a fitting tribute to the locomotive's Scottish heritage. Limited to just 250 individually hand-numbered bottles, it promises to become a sought-after collector's piece for supporters, railway enthusiasts and whisky lovers alike.

Aged for 14 years and matured in a unique Oloroso sherry cask, this Highland single malt is presented in a 700ml bottle featuring a bespoke Art Deco-inspired label. Incorporating key facts about No. 2007 *Prince of Wales* and an illustration of the locomotive itself, the design is finished with premium foil detailing worthy of Britain's most powerful steam locomotive. Priced at £207, the P2 whisky is available exclusively by pre-order, and bottling will commence once the minimum order quantity has been reached, with delivery anticipated in late 2026.

Crafted exclusively for The A1 Steam Locomotive Trust, this premium whisky has been produced in a strictly limited run of just 250 individually hand-numbered bottles. Each bottle is beautifully presented and individually numbered 1-250, making it a unique collector's piece for railway enthusiasts and whisky lovers alike.

Reserve Your Favourite Number - If you'd like to secure a specific bottle number, simply email enquiries@a1steam.com with your preferred number(s).

Reservations will be allocated on a strictly first come, first served basis, so don't delay if there's a number that's special to you.



## P2 DEDICATED DONATIONS UPDATE by Liz Matthews



Summer seems to have been with us for a long, long time this year, but finally the weather seems to be easing back into something more familiar. Good news for steam as the sun-scorched

earth gets a long-overdue soaking, but it also marks the start of Autumn, and with it the gentle wind-down of the year towards the chillier months. Christmas seems to start earlier and earlier each year - the shops are already starting to sneak a few things into their displays - but rather than wait until the next edition of TCC I thought I might try and get ahead of the game slightly and offer you all a selection of items which might be that gift for someone who has everything; I can guarantee there won't be a duplicate present like these in their stockings! So why not bring a little of the railway world into your home this festive season or give someone a truly unique present by sponsoring a part for *Prince of Wales*...

- If a very obvious shiny bit catches your eye, a Handrail Baton can be sponsored for £40
- For £70 you can sponsor a Wash out Door Escutcheon Crownsheet

- Looking forward to lighting a fire this winter? A Firebox Back Sheet could be covered for £350
- Keeping with the festive spirit, work to machine the amazing chimney can be sponsored for £900 - Father Christmas might just have to admire this rather than try to squeeze down it!
- If your stockings are a little bigger than most, the Superheater Header casting could be gifted for £6000

Rather than think about the part itself, maybe you'd be more interested in certain type of fabrication - there are so many manufacturing techniques used to build a locomotive that there's bound to be something that tickles your fancy! Manufactured items can be:

...and with prices from £30 to £30,000 there are a many to choose from.

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

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@a1steam.com](mailto:dedicated.donations@a1steam.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@a1steam.com](mailto:dedicated.donations@a1steam.com) TCC

# GET CHRISTMAS WRAPPED UP WITH *TORNADO*!

With Christmas creeping ever closer, now is the perfect time to start thinking about gifts for the *Tornado* enthusiast in your life - and we've been busy adding plenty of new items to the A1 Steam Locomotive Trust shop! Our latest arrivals include *Tornado* in current green livery pin badges, exclusive *Tornado* nameplate pin badges, a pack of four *Tornado* magnets, lanyards and sticker sheets - perfect little stocking fillers for supporters of all ages. And as the nights draw in and the temperature drops, our *Tornado* men's ski hats and junior bobble hats are ideal for keeping warm while showing your support.

But there's plenty more on the way! We're already preparing a special collection of new *Tornado* Christmas gifts, which will be available from the last week of October at the latest. Look out for *Tornado* Christmas cards, beautifully lasered glass baubles and new blue *Tornado* pin badges, alongside a fantastic range of winter-themed gifts for younger supporters.

For children, we'll have snowy-scene cups with lids and straws, while adults can enjoy a matching snowy-scene coffee cup with lid - both perfect for enjoying a festive drink while dreaming of *Tornado* in steam. And, for perhaps the most mischievous stocking filler of them all, we'll even have bags of 'Reindeer Poop' - chocolate-covered raisins!

The new items are expected to arrive at Darlington Locomotive Works within the next few weeks and will be available through the A1 Steam Locomotive Trust online shop, as well as at locations and events where *Tornado* appears, including stations and rail tours. So whether you're looking for a small stocking filler, a gift for a young *Tornado* fan or something special for the dedicated enthusiast, there'll be plenty to choose from this Christmas.

Keep an eye on the shop and our social media channels for the latest arrivals - and get your *Tornado* Christmas shopping underway! More at [a1steam.com/shop](http://a1steam.com/shop)



*Tornado* Bobble hat £10.50



*Tornado* Lanyard - £8.50



### Hornby release their *Tornado* model with sound fitted!

Just in time for Christmas, Hornby are due to re-release their 00 gauge *Tornado*. The model rejoins the RailRoad range in a new livery scheme: Apple Green with BRITISH RAILWAYS tender lettering. Designed to be robust, this RailRoad model features fully working piston and connecting rods, accurate paint application, and DCC capability.

The model has moulded details, working running gear, NEM coupling sockets, an accessory pack, runs on minimum 2nd Radius track and comes with a 21-pin DCC decoder socket compatible with HM7000 system. It wears British Railways lined apple green livery with modern warning flashes. Part number R30519.

In addition there is also the R30519TXS sound-fitted version. This has a 21-pin DCC Sound decoder fitted, compatible with HMRA compliant systems and HM7000 with a high-fidelity sound profile assembled from recordings of No. 60163 *Tornado*.



[WWW.A1STEAM.COM/SHOP](http://WWW.A1STEAM.COM/SHOP)

## DLW2 UPDATE by Terry Graham

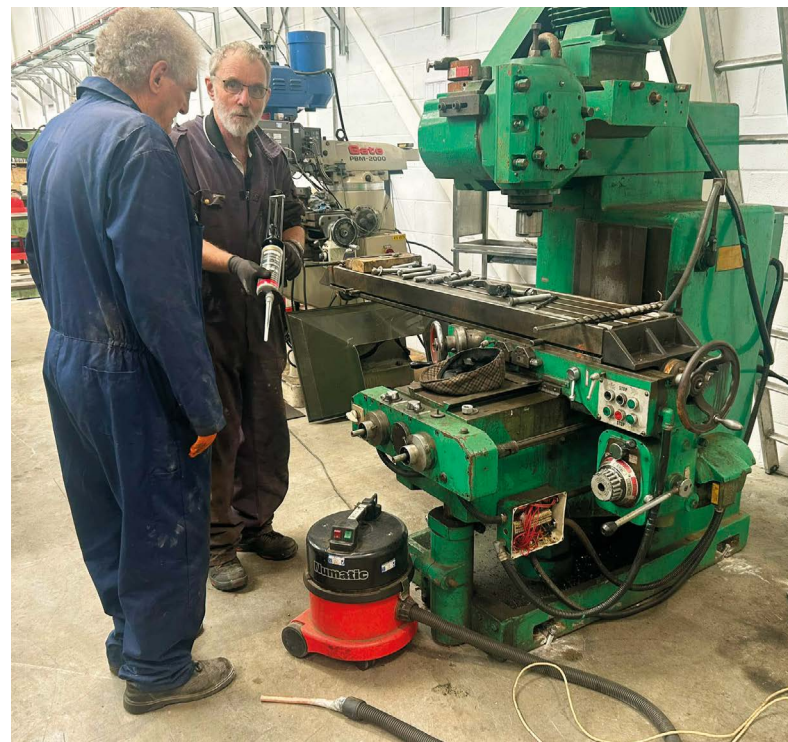
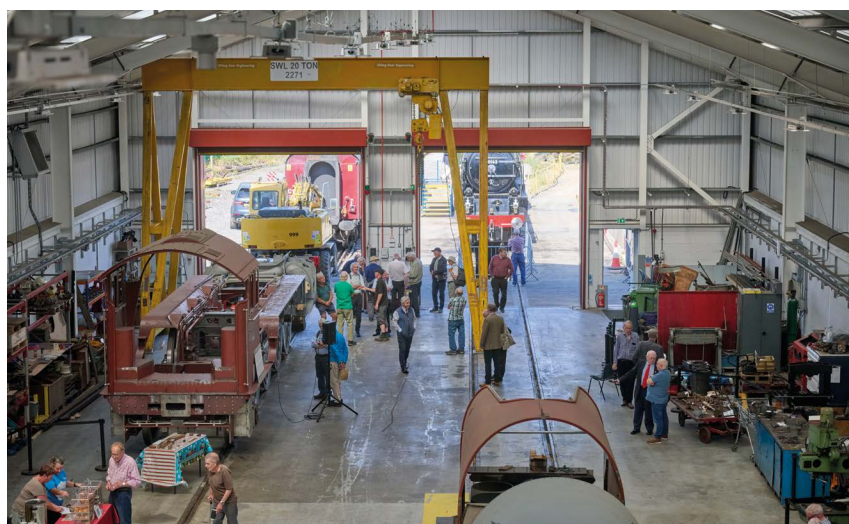
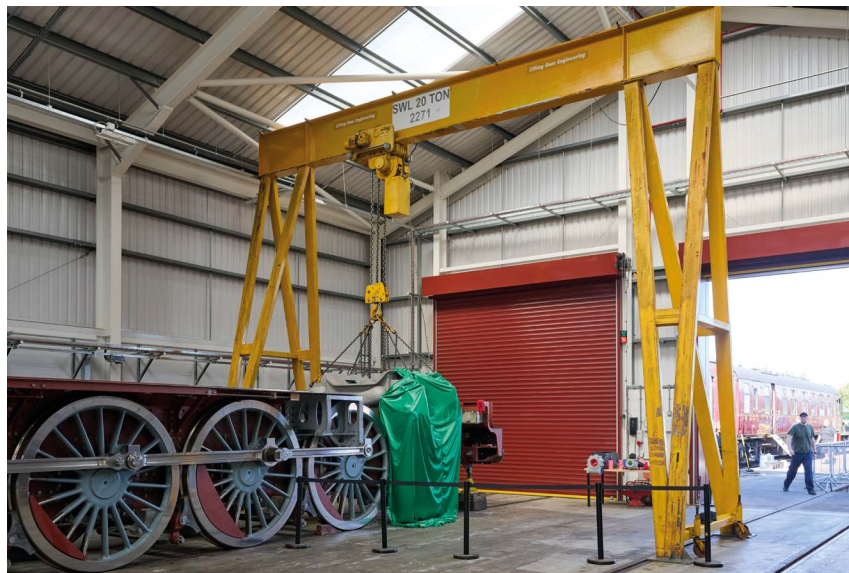
Cleaning and repainting work on the 20ton crane completed in June. With *Tornado* away for a couple of months, creating valuable space within the Works, attention turned to the recertification of the crane and its lifting equipment ahead of installation. The crane's size and capability have brought a few additional challenges. Most notably, the workshop lighting had to be raised by a metre to provide the necessary clearance. However, with a lifting capacity approximately twice that required for the monobloc, it has become significant asset to the Works for both current and future projects.

On Thursday 9<sup>th</sup> July, a HIAB-equipped lorry carefully lifted the crane into its permanent position within the works. Over the coming days, the final electrical connections, commissioning checks and safety sign-off were completed before one of the most significant engineering operations in the construction of the P2 could begin – the installation of the monobloc.

This achievement is about much more than lifting equipment. It is another demonstration of what can be accomplished through the dedication, expertise and commitment of our staff and volunteers. By undertaking much of this work in-house, the Trust has not only reached another important engineering milestone but has also delivered significant cost savings compared with relying entirely on commercial contractors. **TCC**

**Top right: The crane in place, ready to position the monobloc.**

**Centre right: A better idea of the crane's size can be judged from this image taken on the Supporters' Day.**



Members of the Trust engineering team with some of the newly acquired machinery.

## FROM THE ARCHIVES by Graham Langer

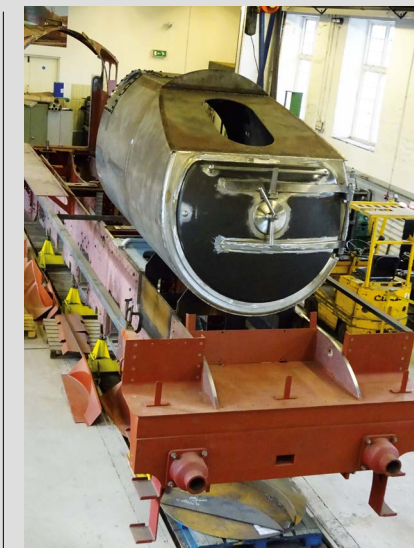
**Summer 2006** – The completed boiler for No. 60163 was unloaded in Darlington on Sunday 16<sup>th</sup> July following its journey from Germany. It was taken off the low-loader using a 200ton crane and moved inside DLW. The boiler was manufactured by Dampfloswerk Meiningen to a modified version of the original LNER Diagram 118 boiler incorporating modern materials, welded construction and a steel, rather than copper, firebox. The boiler was completed on time and to budget and passed its hydraulic test, witnessed by German and British certification authorities, before beginning its journey to the UK.

**Summer 2011** – *Tornado* re-entered traffic sporting BR green with the early emblem on her tender. Following her debut in this guise on the turntable at the NRM, No. 60163 headed off to work trains on the North Yorkshire Moors Railway, Didcot Railway Centre and the West Somerset Railway before resuming her duties on 'The Torbay Express' for the summer. In other news, the establishment of what was to become

a successful collaboration started with Simon Kohler of Hornby presenting Gill Lord (merchandising) with one of their first *Tornado* models.

**Summer 2016** – *Tornado* was busy on the main line, hauling the Belmont VSOE Pullmans round the Surrey hills and working trains to Scarborough and Torbay. TCC 43 carried its first A1 profile, No. 60114 W.P. Allen, and the first of a somewhat shorter series for the P2s, beginning with *Cock o' the North*. In other news, we were able to report that the smokebox had been mounted on No. 2007's frames and the chimney had been cast.

**Summer 2021** - The easing of Covid-19 restrictions had allowed The Trust to resume railtours and after a tentative start *Tornado* was once more in the thick of it! No. 60163 completed an epic summer's work on our 'Aberdonians' and runs with 'The Northern Belle'. *Tornado* railtours for the rest of the year were booking well. Despite Covid-19 and all the other factors that threatened to derail the P2 project, great strides



**Summer 2016, the smokebox was set up for a visit by the Gresley Society.**

continued to be made on multiple fronts and the boiler and monobloc had been commissioned. The planned transformation of the Whessoe Road site was being progressed, with the aim of getting spades in the ground in early 2022. **TCC**



*Tornado* crosses Dent Head Viaduct with 'The Pennine Explorer' on 22<sup>nd</sup> May 2021.

The A1 Steam Locomotive Trust is pleased to display the logos of organisations giving us their ongoing support. Their contribution is gratefully acknowledged.



PRINCIPAL SPONSOR



The Gresley Society Trust



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\* All information correct at the time of going to press late September 2026. For up-to-date information and dates please check the website [www.a1steam.com](http://www.a1steam.com).

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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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