

# THE COMMUNICATION CORD



60163 TORNADO  
New Steam for the Main Line



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

No. 47 Summer 2017

## FUNDRAISING FOR No. 2007 *PRINCE OF WALES* REACHES THE HALF-WAY STAGE



**£2.5m of required £5m  
already donated or  
pledged and over £1.3m  
turned into metal**

Mandy Grant

Pledges towards the building of No. 2007 *Prince of Wales* have already reached £2.5m in less than four years since the launch of the project in September 2013. The new locomotive is already over a quarter complete in terms of engineering effort, with over £1.3m spent to-date. This rapid construction has been fuelled by the project's successful fundraising campaigns which have seen donations and pledges of

over 50% of the £5m required to complete the Mikado in over 7-10 years. In only three years since the launch of the project's 'P2 for the price of a pint of beer a week', funds either already donated or pledged by Standing Order have already passed £2m.

Mark Allatt commented, "We are delighted with the level of support that the project to build Britain's most powerful steam locomotive has received since its

launch. We are hopeful that we will have completed the rolling chassis for No. 2007 *Prince of Wales* next winter and we remain on-track for completion of the new locomotive in 2021. However, to maintain this rate of progress we need to continue to raise in excess of £700,000 per year. This year will see further major announcements as the construction of *Prince of Wales* gathers pace." **TCC**



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# EDITORIAL by Graham Langer



Producing *The Communication Cord* can sometimes be a challenge, mainly because it is hard to decide which is the most important or exciting news to lead with. In the last edition *Tornado’s* 100mph run rightfully dominated the magazine but this time it is our P2, No. 2007 *Prince of Wales*, that is making all the running, with the staggering news that in less than four years half the funding required to complete the locomotive has been pledged and a number of generous sponsorship deals have been agreed. It can be no surprise that The A1 Steam Locomotive Trust leads the way in new main line locomotive construction, having a proven track record and a solid professional base employing a winning set of principles that have been shown to work. Although there is no time to pause if we wish to see the mighty Mikado in steam by 2021 and fundraising and construction efforts must accelerate if we are to reach this target, it is a suitable moment to acknowledge what has been achieved thus far. You can read all the latest news about No. 2007 in the second half of this *Communication Cord*, including the news that Cleveland Bridge, the Darlington engineering firm, have agreed to sponsor the construction of the tender tank as well as having some of their young employees apprenticed at Darlington Locomotive Works and Craftmaster Paints, long term supporters of the Trust, offering to underwrite the topcoat for *Prince of Wales*.

The engine driving the Trust is the enormous amount of voluntary time contributed, both to keeping *Tornado* in traffic and building *Prince of Wales*, literally worth tens of thousands of pounds annually if the man hours were costed. *Best of British* magazine has named volunteers as the number one thing that makes Britain great, in a list of ‘250 Things That Make Britain Great’, published in its May issue. The list was compiled with input from readers, contributors and staff to celebrate the 250<sup>th</sup> issue of the magazine. Among the list of charities, buildings, worthy people and national icons was, at 31<sup>st</sup> on the list, *Tornado*, ahead of both *Flying Scotsman* and The National Railway Museum! Bob Barton, a regular contributor to the magazine who nominated volunteers for the list, added: “The British are always willing to volunteer. Where would our heritage railways, little museums and parks be without them?” I don’t think we can argue with him, can we? Mark Grant, our volunteer coordinator, expands on this theme and appeals for further volunteers on pages 12-13. **tcc**



Yoshi Hoshida

## ‘The Cornishman’ races through Midgham.

## CHAIRMAN UPDATE by Mark Allatt on behalf of the Trustees

Over the past few months the Trustees of The A1 Steam Locomotive Trust have been carefully considering what they are looking for in a new chairman as the organisation moves to its next phase of growth, with two locomotives to operate, a train under acquisition and the potential of a new operational base in Darlington. The Trustees have taken a conscious decision to be thorough in their deliberations – as it has been over 16 years since the last change in chairman - in order that we make the right decision for the future of the Trust. In the meantime, it’s business as usual, with each of the Trustees responsible for his portfolio assisted by our other volunteers. We are rotating the chairmanship of our meetings between us to share the workload and taking outside advice and counsel to aid us in our decision making. If you have any questions, please don’t hesitate to contact any of the Trustees. **tcc**

## TESTING TIMES WITH ‘THE TALISMAN’ by Huw Parker

**Talisman - noun - an object, typically an inscribed ring or stone, that is thought to have magic powers and to bring good luck.**

‘The Talisman’ on 6<sup>th</sup> May must have lost some of its magic powers somewhere along the way as you will see!

The day before the run started normally at the Roberts Road Electromotive Depot in Doncaster and the support crew prepared the engine in bright sunlight. Despite the cold wind, the locomotive was soon in steam and, together with the support coach, began to shine as the team worked their magic on paint and brass work alike. We had completed most of the cleaning, the external examination of the engine and functional checks before we were able to access the inspection pit behind the depot wheel lathe, when potential disaster struck! Inspecting underneath the engine we discovered a badly damaged bronze bush in the middle cylinder valve gear. It was 17:30hrs on Friday - we could certainly not run in this condition and fearing the worst, the train would have to run to Darlington without *Tornado*. However, once our initial reactions faded, there was a chance we could repair the damage in time; after some hurried planning and ‘phone calls, the damaged eccentric rod was taken down and despatched to Locomotive Maintenance Services (LMS) at Loughborough. (LMS provide contracted engineering and maintenance support to *Tornado*). We supplied the necessary dimensions for a new bush, which allowed David Wright to turn a replacement to approximate size, whilst waiting for the rod to arrive. The Electromotive Depot staff could not have been more helpful, enabling us to move the locomotive to another pit road and shunting the support coach into position ready for departure the next day. Their assistance and access to a well-lit inspection pit and surrounding facilities played a key part in ensuring every chance of success.

The repaired eccentric rod arrived back at Doncaster in the early hours of Saturday morning and whilst most of the support crew slept ahead of the train to King’s cross via Darlington, it was successfully re-fitted well before dawn. Our FTR examiner was back at 06:00hrs to inspect the repair and complete the paperwork necessary to release the locomotive back to service. After coaling the tender we were ready for the off. Shortly before the train was due to



Neil Whicker

## Making up for lost time, Tornado hustles past Frinkley Lane with ‘The Talisman’.

arrive from London, we left the depot and moved round to Belmont Sidings, south of Doncaster station. After a few shunting moves *Tornado* and support coach joined the front of the train and headed north towards York and Darlington slightly late. We arrived just three minutes down at York, but with so many alighting to explore York, we left five minutes down, which increased to nine minutes on arrival at Darlington. The remaining passengers headed off to view progress with the P2 at the A1 Steam Locomotive Trust’s Hopetown Lane workshop, whilst we inspected and prepared the engine for the return leg.

We were slightly late leaving Darlington after a complex shunt to return the stock back into the platform, but were soon on our way, running a few minutes down as far as Retford when we had made up all but two minutes against our booked time. Now for the next challenge! Passing Doncaster, we were made aware that the water tanker due to meet us at Newark had burst two tyres on the A1 and was immobilised over an hour away. Our supplier had despatched a second, smaller tanker but it might not arrive in time to meet the booked stop. After considering several other options and waiting to see if the replacement tanker would make better time against the weekend traffic, our final option was to ask Nottinghamshire Fire and Rescue if they could assist. So, shortly after our

arrival at Newark, a fire crew arrived and began to ferry water from a nearby hydrant to the tender. Finally, the smaller tanker also arrived and that too was soon emptied. At this point, we heard that the large tanker was repaired and would meet us at Peterborough. We left Newark just under an hour late and dashed down to Peterborough to take on sufficient water to get the train back to King’s Cross and *Tornado* home to Stewarts Lane. This added a further 20 minutes to our delay, so eventually we left Peterborough 77 minutes down.

Some sustained running around 70mph over the next ¾ of an hour brought us to Digswell Viaduct where signal checks brought speed down to 30mph, before we could power our way down to Potters Bar for a two minute set down. A prompt departure saw the train almost reach 70mph once more before passing the North Circular Road when signal checks reduced our speed on the approach to King’s Cross, arriving 45 minutes late against booked time.

This was certainly a challenging trip, but judging by the positive comments and genuine thanks as people left the train, most of our passengers seemed to have enjoyed the experience and appeared oblivious to the almost “no show” and lack of water! Neither of these are incidents I wish to repeat again. A talisman bringing good luck – Oh, really? **tcc**



# TORNADO ON TOUR by Huw Parker

## 'THE CORNISHMAN'

After a routine tour round the Surrey Hills with a 'Belmond British Pullman' on 17<sup>th</sup> May, the locomotive was prepared for an epic run to the West Country on the 29<sup>th</sup>. 'The Cornishman' took No. 60163 from Paddington to Penzance with the locomotive crossing the Royal Albert Bridge into Cornwall for the very first time. The tour sold out weeks in advance and was eagerly anticipated by those travelling. Some very efficient time-keeping brought the train to Exeter promptly only for the schedule to be disrupted waiting for late-running service trains meaning some of the Devon banks had to be tackled from a standing start! Superb driving saw *Tornado* breast the hills in style and an estimated 2,000hp was recorded in the effort.

Top right: *Tornado* arrives at Reading with the outward-bound 'Cornishman'.

Right: The image that a lot of people have waited nearly ten years to see, *Tornado* crosses the Royal Albert Bridge at Saltash.



Mandy Grant



Michelle McDonald

Left: 'The Cornishman' in Devon! The train passes Powderham beside the Exe estuary.

Hundreds of people watched the special cross Brunel's magnificent Tamar Bridge and hundreds more were ready to greet *Tornado* when she arrived in Penzance. For the record, No. 60163 carried the 'Matey' headboard one last time in honour of Ray Towell, who had been such a friend of the Trust; Ray had a house in Cornwall. **TCC**



Richard Jarrett



Sophie Bunker-James

Extraordinary scenes at Penzance after *Tornado* had arrived with 'The Cornishman'.



# TORNADO ON TOUR by Huw Parker

**BODMIN & WENFORD RAILWAY – 31<sup>st</sup> May to 4<sup>th</sup> June**

Neil Prior



**Ancient and modern (you decide which!) at Bodmin Parkway during Tornado's stay on the line.**

Tornado's first visit to Cornwall continued with a week at the Bodmin & Wenford Railway, operating timetabled trains between Bodmin and Bodmin Parkway. The week saw exceptional crowds visit the railway and our sales stand did a roaring trade.

June was a quieter month for Tornado following the excitement of the run to Cornwall and the stay at the Bodmin & Wenford Railway. However, the locomotive still completed a number of

trips including a charity special for The Railway Children on the 13<sup>th</sup>, a 'Belmond British Pullman' on the 16<sup>th</sup> and her first 'Torbay Express' on the 18<sup>th</sup>, albeit with a Class 66 helping because of a perceived fire risk! Alas a troublesome injector prevented No. 60163 from working the next 'Torbay Express' on the 2<sup>nd</sup> July and despite every effort to find a substitute steam locomotive the tour ran diesel-hauled. Normal service was resumed on 23<sup>rd</sup> July with a faultless run to Kingswear and back. **TCC**



David Lecher

**Above: Beattie well tank No. 30587 is seen next to Tornado at Bodmin General in June. It is staggering to think that nearly 140 years separates the construction of these two locomotives!.**

**Right: Hauling a regular 'Belmond British Pullman', Tornado is seen at Shere on 16<sup>th</sup> June.**



lan Mar

**Below left : The 'Belmond British Pullman' is seen at Gomshall on the same day.**



**Right: Having missed a 'Torbay' because of injector trouble, No. 60163 was back in harness on 23<sup>rd</sup> June and is seen at Paignton on that date.**



Robert Sherwood



# TORNADO ON TOUR by Graham Langer

## 'THE TOWY TORNADO'

On 5<sup>th</sup> August, 'The Towy Tornado' was run by Pathfinder Tours, originating in Eastleigh with the steam leg from Bristol to Carmarthen and return with *Tornado*. DB Cargo Class 66 No. 66088 brought the train from Hampshire before handing it over to No. 60163 at Temple Meads; a slightly late departure was converted to an early arrival at Newport (despite signal checks) before *Tornado* went on to flatten Stormy Bank prior to being routed via the Swansea District lines thus avoiding Cockett bank (which nearly claimed *Tornado* as a victim the first time she ascended it, but for some superb work from driver Fred Lewis!).



Mick Rogers

Tangling with other trains meant that 'The Towy Tornado' arrived one minute down at Carmarthen after some sparkling running from Bristol, albeit with only 11 coaches (the loop at Carmarthen will no longer handle 12). After the layover in West Wales a thoroughly competent run back to Bristol produced a ten minute early arrival before some creative pathing by DBC resulted in the train arriving back at Eastleigh nearly an hour early! **TCC**

Above: No. 60163 with 'The Towy Tornado' climbs Stormy Bank at over 60mph.

Left: *Tornado* is seen in warm evening sunshine at Ponyclun with the return leg of 'The Towy Tornado'.

Below: Running 'engine & van' on her way back to Stewarts Lane on 6<sup>th</sup> August, *Tornado* is dwarfed by the overhead line equipment being installed on the route to the west.



Mick Rogers



Robert Stewart

# 'THE CHESTER CHRISTMAS CRACKER' -

## SATURDAY 25<sup>TH</sup> NOVEMBER 2017



A festive trip to the ancient city of Chester, picking up at London Euston, Watford Junction, Milton Keynes Central and Northampton.



Paul Isles

On Saturday 25<sup>th</sup> November, passengers are invited to join *Tornado* on 'The Chester Christmas Cracker' to enjoy a festive trip to the medieval city of Chester and experience their Christmas Market. Enjoy a high speed run on the West Coast Main Line, steam hauled throughout. Picking up at London Euston, Watford Junction, Milton Keynes Central and Northampton.

No other city encapsulates Old England quite as well as Chester, with its truly splendid black and white timbered buildings and the famous Eastgate Clock. Next to Chester's ancient cathedral you will find Chester's magical Christmas Market, with over 70 traditional wooden chalets huddled around a sparkling Christmas tree. Chester Castle and Military Museum are a short walk away, along the city walls. **TCC**



Christmas lights, Chester.

- **First Class Dining**  
Seats at a table for two\* or four in a First Class carriage. Includes a silver service full English breakfast on the outward journey and a four course dinner on the return leg.
- **First Class Non-Dining**  
Seats at a table for two\* or four in a First Class carriage. Includes complimentary teas and coffees.  
A buffet car is also available.
- **Standard Class**  
Seats at a table for four in a heritage carriage. An on-board buffet serving snacks and hot & cold beverages will be available.

TICKET	PRICES
First Class Dining	£245.00
First Class Non-Dining	£159.00
Standard Class	£99.00

TIMES ( PROVISIONAL)	OUTWARD	RETURN
London Euston	08:00hrs	21:20hrs
Watford Junction	08:30hrs	20:50hrs
Milton Keynes Central	09:00hrs	20:15hrs
Northampton	09:20hrs	19:50hrs

Terms and conditions are available on request. Guaranteed 'tables for two' in First Class Dining and First Class Non-Dining are available for a supplement of £25.00 per person. All profits from this tour go towards keeping *Tornado* on the main line in future years.

Online and telephone bookings are handled by our booking agents **UK Railtours**.  
Go to [www.ukrailtours.com](http://www.ukrailtours.com) to make an online booking, or call 01438 715050 to book over the phone. In the event of cancellation or haulage problems please see our full terms and conditions of carriage.



100mph WITH THE BBC by Tom Ingall

It all began with a text from Graeme Bunker-James. Would I like to make a film about some high speed running with *Tornado*? To be honest as we sat in the Trust's support coach waiting to depart from Doncaster on the night of 11<sup>th</sup> April I had a fleeting regret that I'd bitten his arm off, especially when I realised just how expensive the basket that I'd put all my eggs in was.

With a cameraman on board, another responsible for the seven tiny cameras rigged on the locomotive and a further five camera operators waiting along the line, this was a big night out for BBC Yorkshire. If I ever wanted to be allowed back into the office, everything had to be the definition of tickety-boo. It can take time to move any documentary proposal from an idea to screen. Questions of funding and access can derail good intentions (no pun intended). I knew the second would not be a stumbling block as the Trust has never been anything but ready to work with the media, but securing some money to move ahead meant a lot of emailing and gentle persuasion.



Tom Ingall sets up a shot at Doncaster.

The original concept remained (almost) intact throughout, following the build up to the run, looking at why it was happening and painting in some of the historic background. The second part of the film would be the night of the run itself. With no guarantees the test run would go as planned, I shot quite a lot of material for the first part, so it could make more of the finished programme if required. I had

Rob Morland



Tom interviews Graeme Bunker-James at York.

intended to delve much more into the story of speed on the railways and tell the tale of the gradual push to 100mph, from *Rocket* to the 'Races to the North' and beyond.

The idea even made it to the first edit of the programme, but fell on the cutting room floor when it transpired we had 40 minutes of material which we were trying to squeeze into a 29 minute slot! This is because the test run was far beyond my wildest expectations. All of the cameras on the locomotive returned exciting pictures which when synced with the audio recorder, (worn northbound by Huw Parker and southbound by Graeme Bunker-James) they revealed an intimate portrait of a steam locomotive footplate. One can imagine how spectacular it might have looked during daylight but at night, the glow of the fire, the fleeting glimpses of light whizzing past, the dashes through the stations really added to the clandestine secret atmosphere. Of course the added drama of three attempts at the ton and it all coming down to the last few miles gave the film a naturally thrilling climax which seems to have really resonated with the non-enthusiast audience. The results made the national news on television and radio and the programme was the most watched

video of the day on the BBC website.

There are so many 'thank yous' to say (with apologies to those I accidentally omit), to the Trust and all at DB Cargo embracing and meeting our expectations. To Network Rail, *Steam Railway* and the National Railway Museum for taking part in the filming. To David Wright of Locomotive Maintenance Services and all at Data Acquisition and Testing Services who didn't object to having cameras thrust into their face while working. To all at BBC Yorkshire who worked late and rose to the challenge, in particular to the Executive Producer Nicola Addyman who embraced the idea and my Associate Producer Paul Greenan who gave excellent notes at every stage of the process to keep everything on track (pun intended). The success of the film is as much yours and theirs as anything that can be attributed to me. Your comments have been a delight to read and we have shared them amongst the team. Thank you. We're still chasing a network repeat slot and even the Director General has requested a copy to view. Steam fans, it seems, are everywhere. **TCC**

(Note: Since penning this article the programme was shown on BBC 4 on 7<sup>th</sup> August).



Some of the mini-cams fitted to *Tornado* to record the 100mph run.

ONLY 50 PACIFICS REMAINING IN THE (EXTENDED) 163 PACIFICS CLUB by Mark Allatt

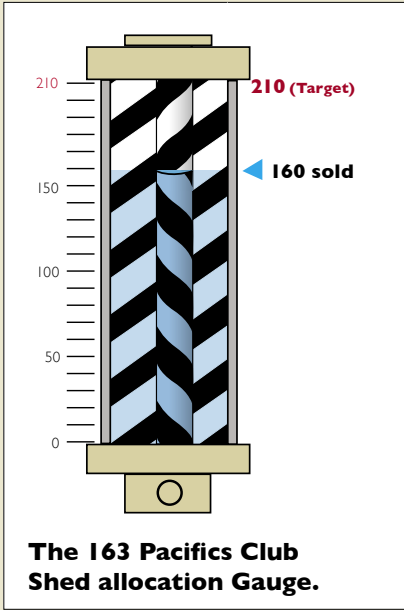
The last few months have seen tremendous progress in our campaign to raise £200,000 to pay for No. 60163 *Tornado*'s tender. As you will recall, William Cook Cast Products Ltd, through its chairman Sir Andrew Cook CBE, funded the construction of No. 60163's tender in 2006. *Tornado*'s tender is currently owned by William Cook Cast Products Ltd (the Trust's Principal Sponsor) and it is leased to the Trust under a 15 year loan agreement which will come to an end in 2021.

The 163 Pacifics Club was set up in 2013 to fund the purchase of *Tornado*'s tender from William Cook Cast Products Ltd through the sponsorship of the 163 ex-LNER express passenger Pacifics from the Gresley class A3s/ A4s, Thompson class A1/1 and Peppercorn class A1s. 163 people making a one-off donation of £960 (or £10 per month over eight years) with the addition of Gift Aid this would raise £195,600. At the time of publication of *TCC46* 141 Pacifics had already found new shed allocations, leaving only 22 remaining for sponsorship.

Given some of the wonderful names carried by the other LNER Pacifics from the Raven class A2s, Thompson classes A2/1s, A2/2s & A2/3s and the Peppercorn class A2s and our desire to try to purchase the tender from WCCP before *Tornado*'s 10<sup>th</sup> birthday, we decided to extend The 163 Pacifics Club to include those as well. We also added in the ill-fated Gresley class A4 No. 4469 *Gadwall* (renamed *Sir Ralph Wedgwood* – name transferred to No. 4466/60006 formerly *Herring Gull*) which was destroyed during a Baedeker raid on York on the night of 28<sup>th</sup>/29<sup>th</sup> April 1942 and on request the honorary Pacific, Gresley class W1 No. 10000/60700 – unnamed but the names *British Enterprise* and *Pegasus* were proposed.

At the time of writing, 160 Pacifics had already found new shed allocations, leaving only 50 remaining for sponsorship. With *Tornado*'s having attained the magic 100mph and awaiting final approval to operate selected main line trains at 90mph, let's complete the project we embarked upon in 1990 through the purchase of No. 60163's

tender before the start of her 10<sup>th</sup> birthday celebrations in August 2018. For more information on how you can become a member of The 163 Pacifics Club visit [www.a1steam.com](http://www.a1steam.com), email [enquiries@a1steam.com](mailto:enquiries@a1steam.com) or call **01325 460163. TCC**



No. 60005	Sir Charles Newton	No. 60516	Hycilla
No. 60035	Windsor Lad	No. 60517	Ocean Swell
No. 60040	Cameronian	No. 60518	Tehran
No. 60057	Ormonde	No. 60519	Honeyway
No. 60066	Merry Hampton	No. 60520	Owen Tudor
No. 60070	Gladiator	No. 60521	Watling Street
No. 60073	St. Gatien	No. 60522	Straight Deal
No. 60075	St. Frusquin	No. 60524	Herringbone
No. 60083	Sir Hugo	No. 60526	Sugar Palm
No. 60088	Book Law	No. 60527	Sun Chariot
No. 60095	Flamingo	No. 60528	Tudor Minstrel
No. 60098	Spion Kop	No. 60529	Pearl Diver
No. 60101	Cicero	No. 60531	Bahram
No. 60105	Victor Wild	No. 60533	Happy Knight
No. 60144	King's Courier	No. 60534	Irish Elegance
No. 60502	Earl Marischal	No. 60535	Hornets Beauty
No. 60503	Lord President	No. 60536	Trimbush
No. 60504	Mons Meg	No. 60537	Bachelors Button
No. 60507	Highland Chieftain	No. 60538	Velocity
No. 60508	Duke of Rothesay	No. 60539	Bronzino
No. 60510	Robert the Bruce	No. 2400	City of Newcastle
No. 60512	Steady Aim	No. 2401	City of Kingston upon Hull
No. 60513	Dante	No. 2402	City of York
No. 60514	Chamossaire	No. 2403	City of Durham
No. 60515	Sun Stream	No. 2404	City of Ripon

Names still available for allocation.



# VOLUNTEERS! *by Mark Grant*

The A1 Steam Locomotive Trust prides itself in having some of the most conscientious volunteers within our industry. Just about everyone you meet selling merchandise, stewarding, cleaning *Tornado*, fundraising and even the Trustees, are volunteers! Sometimes they don't get the credit they deserve. Travelling to locations all over the country at their own expense, staying away from home, getting up early in the morning and going to bed very late at night, sometimes for several days at a time, these are just some of the things that they do to make sure that No. 60163 *Tornado* is always ready for her 'days out'. They try to give you the best experience they can as you savour the delights of riding behind or viewing *Tornado*.



**A1 Volunteers at work on 'The Cornishman'.**

**Left: Diana Hurfurt, Janet Hill, Sheila Seabrook & Stuart Spindler (merchandise) on the support coach.**

**Above right: Support Crew in Penzance: David Wright, Huw Parker, Tom Blight, Ben McDonald, Katie Pearson, Sophie Bunker-James & Graeme Bunker-James.**

So much goes on behind the scenes, from advertising, fundraising, administration, planning the tours and events, organising merchandise and making sure that we always have enough stock and getting it from one place to another, getting brochures written, rostering the teams for support crew, merchandise and stewards. All of this takes a lot of dedication, time and effort. And it's not just *Tornado* any more, our volunteers also attend the P2 Roadshows, by both giving up their time for the presentations and promoting the locomotive at different locations around the UK, we have volunteers helping with the construction of our new locomotive, with advertising and marketing, fundraising, office administration and the administration of our Dedicated Donations Scheme.



**Andrew Taylor, Chris Sheilds (merchandise), Nigel Roake, David Reid (stewards).**

Mandy Grant



All P2 photos Bob Hughes



**Above: Gordon Little drilling sections for half round beading.**

**Right: Martin Brooks machines a brake hanger bracket.**



**Above: Mike Wood opening out splashers bolt holes.**



Although it can involve long days and lots of hard work, we do have a great time doing all of this and when we can, we enjoy a social get together for a meal and a bit of a 'wind' down. We've just brought ourselves into the 21<sup>st</sup> century by utilising an online calendar and messaging system to make it easier for our volunteers to 'sign up' for our stewarding and merchandising roles, the main aim being that it will vastly cut down on the reams of emails received by those charged with the task of rostering so everything is in one easy to find place! Communications just got quicker, more secure and hopefully more fun!

**P2 Volunteers at work at Darlington Locomotive Works.**



**Above: Gordon Best and Terry Greaves filling mailing tubes.**

**Left: Gordon Wells and Mike Wood fitting splashers bolts.**

We are always on the lookout for more people to help in all sorts of different ways. If you feel that you've got what it takes, please contact myself [mark.grant@a1steam.com](mailto:mark.grant@a1steam.com) expressing which area you are interested in volunteering in and I will send you further details. **TCC**



## 'THE NORTH BRITON' - SATURDAY 24<sup>TH</sup> FEBRUARY 2018

To Carlisle via the scenic Settle and Carlisle Railway, picking up at Cambridge, Ely, March, Peterborough, Newark Northgate, Doncaster.

And what finer way to start the year than enjoying a steam-hauled journey over the magnificent Settle & Carlisle Railway! The train departs from Cambridge, Ely, March and Peterborough with a Class 67 diesel at the head, also calling at Newark before reaching Belmont Yard, just south of Doncaster, where the diesel is detached and No. 60163 backs down on to the train.

After a final pick-up at Doncaster, *Tornado* gets into her stride as we run via Hambleton Junctions and Leeds, then up the picturesque Aire Valley, passing the Worth Valley Railway at Keighley and the market town of Skipton.

At Settle Junction the real purpose of the day begins! The long gruelling climb to Blea Moor Summit includes the crossing of the iconic Ribbleshead Viaduct. True to her name, *Tornado* will roar through the glorious scenery of Dentdale, topping Ais Gill Summit before descending through Appleby to arrive at Carlisle. The station is right in the heart of the compact 'border city' and you will have a couple of hours in which to stretch your legs and explore.

But our steam adventure is far from over! We take our seats once more and enjoy a trip right across England at its narrowest point, west to east, taking the Low Fell Curve and arriving at Tyne Yard in Gateshead where No. 60163 is detached. Our Class 67 locomotive will have made her way from Doncaster ready for the homeward run along the East Coast Main Line. **TCC**



Ian Hardman



*Tornado* crossing the iconic Ribbleshead viaduct.

Ian McDonald

### ● First Class Dining

Seats at a table for two\* or four in a First Class carriage. Includes a silver service full English breakfast on the outward journey and a four course dinner on the return leg.

### ● First Class Non-Dining

Seats at a table for two\* or four in a First Class carriage. Includes complimentary teas and coffees. A buffet car is also available.

### ● Standard Class

Seats at a table for four in a heritage carriage. An on-board buffet serving snacks and hot & cold beverages will be available.

TICKET	PRICES
First Class Dining	£249.00
First Class Non-Dining	£159.00
Standard Class	£109.00

TIMES ( PROVISIONAL)	OUTWARD	RETURN
Cambridge	07:30hrs	23:00hrs
Ely	07:30hrs	22:40hrs
March	08:10hrs	22:20hrs
Peterborough	08:30hrs	22:00hrs
Newark Northgate	09:15hrs	21:15hrs
Doncaster	10:30hrs	20:30hrs

Terms and conditions are available on request. Guaranteed 'tables for two' in First Class Dining and First Class Non-Dining are available for a supplement of £25.00 per person. All profits from this tour go towards keeping *Tornado* on the main line in future years.

Online and telephone bookings are handled by our booking agents UK Railtours. Go to [www.ukrailtours.com](http://www.ukrailtours.com) to make an online booking, or call 01438 715050 to book over the phone. In the event of cancellation or haulage problems please see our full terms and conditions of carriage.

## Covenantors' Diary by Gemma Braithwaite



**CONVENTION REMINDER** – We look forward to seeing you at The A1 Steam Locomotive Trust's 2017 Annual Convention and Dinner on Saturday 30<sup>th</sup> September 2017, for which we will be returning to Darlington, the home of the Trust and No. 60163 *Tornado*'s birthplace.

This year's Convention will be split between morning and afternoon sessions. The first, at the Mercure King's Hotel Darlington, will look at the Trust's achievements since the last Convention before covering last year's engineering challenges with *Tornado*, our locomotive's operations and take a look forward into the 2018 programme. There will also be the first half of the progress update on the construction of Gresley class P2 No. 2007 *Prince of Wales*. Lunch will then be

served (optional) in the King's Hotel. Following this, buses will transport guests to Darlington Locomotive Works. There will then be a second presentation on the project to build *Prince of Wales* and the opportunity to view the current progress on the locomotive at the Works. All Covenantors and Founders/Boiler/Mikado Club /163 Pacific Club members and guests are welcome to attend both presentations.

We will also be holding our Annual Dinner on the evening of Saturday 30<sup>th</sup> September at Mercure King's Hotel Darlington. This has always been a very enjoyable part of the Convention, and we hope those of you who have not been able to attend the Dinner in previous years will join us.

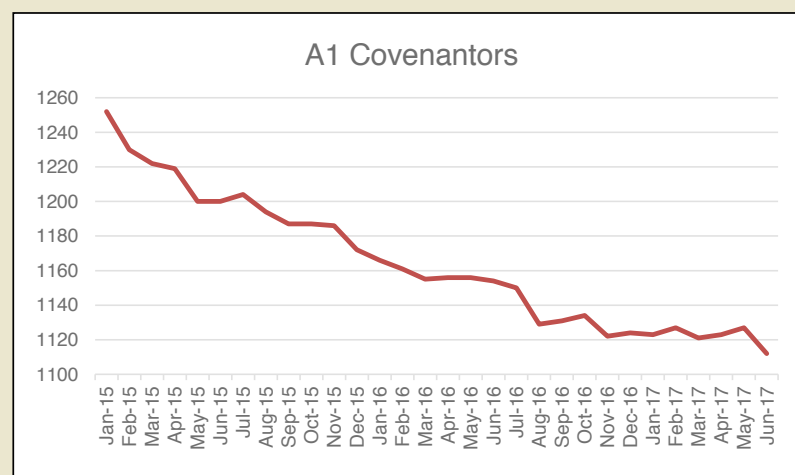
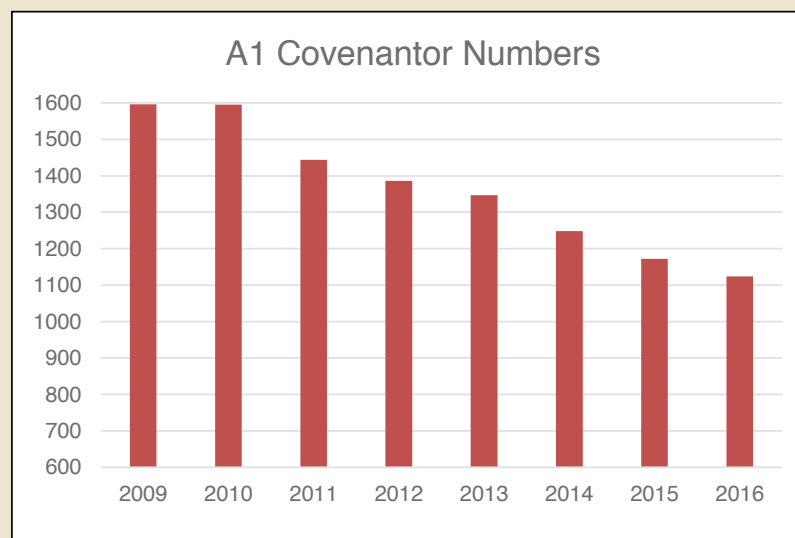
Please note that the deadline for applying for tickets is Friday 15<sup>th</sup> September 2017 in order to ensure that the necessary bookings can be made and your tickets sent out in time. Please do respond in good time should you wish to attend. **TCC**

## KEEPING TORNADO ON THE TRACKS by Mark Allatt

Keeping No. 60163 *Tornado* in tip-top working order is an expensive business. Whilst the profit from operating our programme of main line tours and *Tornado*'s hire fees from heritage railways and working for other rail tour promoters currently covers her day-to-day and year-to-year maintenance costs, they do not at present generate a sufficient surplus to fund her five and ten year overhauls, conservatively estimated at around £500,000 each. Therefore, it is vital for us to continue to maintain (and hopefully grow) *Tornado*'s on-going covenant income.

The number of individual covenantors supporting *Tornado* has gradually declined since a peak of around 1,600 (many more £5pm equivalents) in 2009 to 1,112 today, each person donating an average of £9.98pm before Gift Aid. This is mostly due to anno domini and new covenantor recruitment failing to keep pace as we are only managing to bring on-board around five new covenantors per month, but are losing around ten every month. We have issued almost 2,700 covenantor numbers since launch but only have 1,112 on our books, a loss of over 1,500 supporters over the past quarter of a century.

The last couple of months have seen this attrition slow and so hopefully it will stabilise and start to grow on the back of the 'I ♥ S&C' Plandampf and 100mph test run. I would therefore urge all our existing A1 covenantors to help us to recruit new supporters and for P2 covenantors (64% of whom are not also A1 covenantors) to come on-board if they are able to **TCC**.



For more information on how you can help to keep Britain's only new-build main line steam locomotive on the tracks visit [www.a1steam.com](http://www.a1steam.com) email [enquiries@a1steam.com](mailto:enquiries@a1steam.com) or call 01325 460163



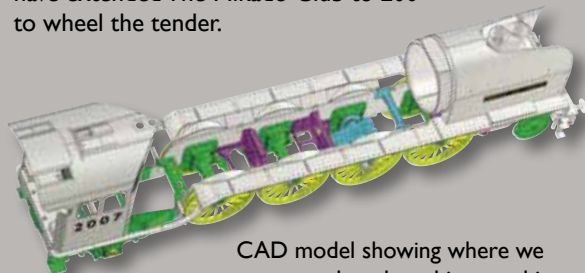
# “We want eight and we won’t wait - let’s make a Mikado!”

**Help us to wheel new Gresley class P2 2-8-2 No. 2007 Prince of Wales during spring 2017**

Following the success of The Founders Club (to get the project to the point of cutting the frames) and The Boiler Club (to fund the construction of the boiler) we have decided to establish The Mikado Club to fund the wheeling of No. 2007 Prince of Wales.

We set an initial target for The Founders Club of at least £100,000 from 100 ‘Founders’ but due to the overwhelming generosity of our supporters we actually raised £450,000 from 360 donors. Our aim for The Boiler Club is to raise at least £600,000 from 300 supporters each donating £2,000 in up to 40 payments of £50 and we are already we are already almost half way there.

If we are to remain on schedule to complete No. 2007 Prince of Wales in 2021 we need to wheel the engine in winter 17/18. We have therefore set ourselves the challenge of raising £200,000 through The Mikado Club from 160 supporters each donating £1,000 (plus Gift Aid) to the project in up to eight payments of £125 by standing order. In June 2017 we reached this target and have extended The Mikado Club to 200 to wheel the tender.



CAD model showing where we expect to be when this appeal is successful.



## Special benefits for members of The Mikado Club

- Reserved seat on one of No. 2007's first main line trips
- Reasonable access to No. 2007 at all times
- Opportunity to buy exclusive Mikado Club badge
- Opportunity to join one of the teams building No. 2007
- First choice of other components to sponsor
- Special Mikado Club day with *Tornado*
- Special limited edition version (signed/numbered) of Stephen Bainbridge's new painting of No. 2007 Prince of Wales at Darlington station



## Join The Mikado Club today!

**Thank you for your valued support.**

**Together we can build this remarkable locomotive!**



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

For further information please visit [www.p2steam.com](http://www.p2steam.com) email [enquiries@p2steam.com](mailto:enquiries@p2steam.com) call 01325 460163 or write to The Mikado Club, P2 Construction Fund, Darlington Locomotive Works, FREEPOST RTJS-XECR-XARL, The A1 Steam Locomotive Trust, Hoptown Lane, Darlington DL3 6RQ

## • SHED NOTICES •

Sophie Bunker-James



Emma Lay travels in style on 'The Talisman'.

## ‘THE TALISMAN’ BRINGS GOOD LUCK FOR EMMA

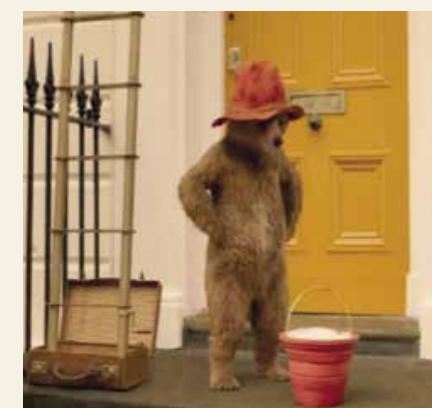
Sophie Bunker-James organised a competition on the *Tornado* Railtours Facebook page with the winner getting a first class seat on 'The Talisman'. All entrants had to do was to 'like' and 'share' a post promoting the tour. The lucky winner was Emma Lay. She and her husband enjoyed a day out in First Class Dining with a complementary bottle of champagne. Follow the *Tornado* Railtours page on Facebook for up to date information about railtours promoted by The A1 Steam Locomotive Trust and for future competitions.

## STOP PRESS! *Tornado* and Paddington (Bear)

We are thrilled to announce that *Tornado* plays a starring role in the new PADDINGTON 2 movie to be released on 10<sup>th</sup> November 2017 along with luxury vintage train, Belmond British Pullman.

PADDINGTON 2 is a family-comedy film. No. 60163 took part in filming at Paddington station and at Leavesden Studios in December and January 2017. The film is set to release in the UK on 10<sup>th</sup> November 2017.

In celebration of the release of PADDINGTON 2 on 10<sup>th</sup> November 2017, *Tornado* is to haul two Paddington Afternoon Tea journeys with the Belmond British Pullman. Departing from London Victoria Station on 2<sup>nd</sup> December 2017 and 16<sup>th</sup> February 2018, the train will take families on a Paddington-inspired journey of a lifetime. Suitable for small and grown up bears, the Afternoon Tea menu includes sweet treats and marmalade sandwiches.



## TORNADO WARNING by Güntürk Üstün

This tornado with her strong and steamy breath  
 Causes no harm but hope for her believers  
 This tornado with her rare and rolling roar  
 Causes no fear but feast for her devotees

This is not a high-speed train coming  
 This is the showing up of a high-spirited speed  
 Awaited for ages all through the pleasant but scanty  
 Books, films and museums of railway history

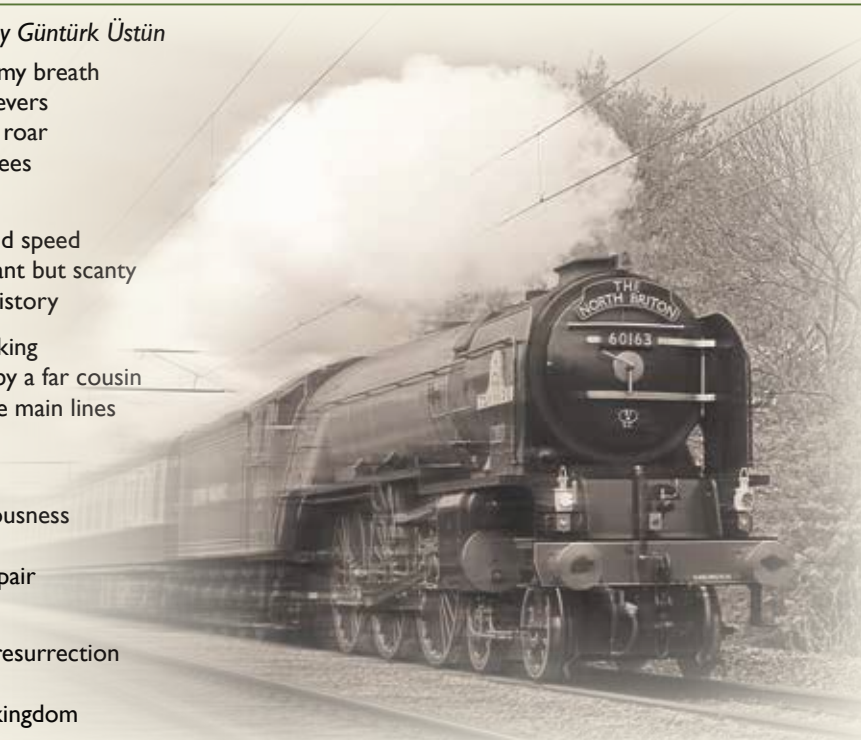
This tornado is not very keen on breaking  
 Amazing records soon to be eclipsed by a far cousin  
 All she desires is to be let polishing the main lines  
 With her wheels of will and wisdom

This tornado on her road of steel  
 Causes no pompous treason and tediousness  
 But pure trainspotting and triumph  
 In these rough times of doubt and despair

This is not a usual tornado warning  
 This is an unusual celebration for the resurrection  
 Of many railfans' long-lost daydream  
 As a *Tornado* made of steel in the rail kingdom

Güntürk Üstün is a Turkish poet who regularly writes in *Rail Passion* and *La Lettre du Cheminot*. A long-time railway and maritime enthusiast he currently resides in Istanbul.

Gareth Griffiths







**Tornado speeds through Wivenhoe with 'The Walton Pier Express', part of a series of trains handled by No. 60163 on 12<sup>th</sup> August to celebrate the 150<sup>th</sup> Anniversary of the railway reaching Walton-on-the Naze.**



AI PROFILE - No. 60118 Archibald Sturrock by Phil Champion



Michael Denholm

No. 60118 Archibald Sturrock, spare engine at Darlington Top Bank in 1964.

The fifth of Peppercorn’s A1s, No. 60118 was built at Doncaster as works No. 2035. It was one of a pair to emerge in November 1948. On the 12<sup>th</sup> it entered service from Copley Hill shed resplendent in LNER apple green with black and white lining, ‘BRITISH RAILWAYS’ on the tender and with a plain chimney. No. 60118 was one of five A1s to enter service from this shed when new, working were between Yorkshire and London.

The first recorded train was the up ‘Yorkshire Pullman’ on 4<sup>th</sup> August 1949. Repainting into BR express blue came when it visited Doncaster Works for general repairs in May 1950. 11 A1s had already been so painted; No. 60118 was one of a batch to be repainted that month. On 13<sup>th</sup> July No. 60118 was named Archibald Sturrock at Doncaster after the early Great Northern Railway locomotive superintendent whose tenure was from 1850 to 1866. In previous months nine A1s had been named but No. 60118 was one of no less than seven named in July. Several detail changes took place about this time; the fitting of a lipped chimney, the removal of the Flaman speed recorder (driven off the right-hand coupling pin) and the fitting of the Hudd system of ATC – one of twelve A1s fitted. Workings noted show No. 60118 at Hull on 23<sup>rd</sup> March 1951 and leaving Stockton two days later at 18:13hrs with the 12 coach Newcastle – Manchester train. As

well as its home shed it was also noted at Ardsley on 18<sup>th</sup> February 1951.

Another change in appearance came in January 1952 when it was one of four repainted into BR green; although it was fifth in the class, another 18 had previously been repainted. In September 1953 No. 60118 was prepared for the Doncaster Works centenary exhibition. Through the 1950s Archibald Sturrock continued to stride between Yorkshire and the capital. Named trains included the up ‘Bradford Flyer’ in 1954 and 1956, ‘The Queen of Scots’ on 2<sup>nd</sup> February 1954 when it failed at Peterborough, the down 12:00hrs departure from King’s Cross on 20<sup>th</sup> October 1956 and the 11:50hrs down train on 11<sup>th</sup> July 1959. Other workings noted include the 12:20hrs down ‘Northumbrian’ on 23<sup>rd</sup> January 1957, the down ‘Aberdonian’ nine days later and the 11:40hrs up ‘Yorkshire Pullman’ on 4<sup>th</sup> July with a return working on the 17:52hrs down ‘West Riding’. Other main line trains

hailed in 1956/7 were the 07:50hrs King’s Cross – Newcastle / Leeds returning into the capital at 19:58hrs with a train from Glasgow, the 15:40hrs and 18:15hrs from the ‘Cross to Leeds. The latter two trains were usually balancing workings of the Leeds / Hull trains which had arrived at 11:43hrs and 14:34hrs respectively. Trains from Wakefield featured with an arrival in London at 13:30hrs and arrivals at the ‘Cross at 22:09hrs with a Newcastle / Bradford train were noted a number of times in May and June 1957. As well as passenger work, freight work was also noted with No. 60118 passing through Newark with the 05:55hrs New England to Worksop goods on 22<sup>nd</sup> November 1956. In the mid-1950s the smokebox numberplate and handrail were transposed and Archibald Sturrock was one of the first A1s to receive the later BR crest on its tender in 1957. A working away from the usual haunts must have occurred for No. 60118 to be sighted on Cambridge shed

on 19<sup>th</sup> November 1958.

The early 1960s opened with a generally similar pattern of working. Of note is that on 1<sup>st</sup> May and 8<sup>th</sup> it was on ECML diverted traffic via Cambridge. On 9<sup>th</sup> September No. 60118 was failed at Barkston on the 18:12hrs King’s Cross – Leeds, being replaced at Newark by WD No. 90131 running tender first. Other named trains were ‘The White Rose’ on 29<sup>th</sup> April 1960, the 15:40hrs up ‘Harrogate Sunday Pullman’ of 25<sup>th</sup> June 1961 and the 16:40hrs down ‘Tyne-Tees Pullman’ on 5<sup>th</sup> August. A rare sighting at Newcastle followed by servicing on Gateshead shed was recorded on 25<sup>th</sup> August 1962. During the early 1960s a Smith-Stone speed recorder, driven off the left rear driving wheel was fitted. Several parcels workings from King’s Cross featured in late 1962 and early 1963; 18:26hrs to Hull with nine coaches on 30<sup>th</sup> August 1962, 14:55hrs to Leeds with 11 vehicles on 1<sup>st</sup> September and the 3N10 18:28hrs to York noted on three occasions. Also the 3B21 Newcastle – York parcels was hauled on 23<sup>rd</sup> January 1963.

After many years based at Copley Hill, No. 60118 moved twice in the last years of its life. A transfer to Ardsley heralded a wider sphere of operations. As well as pulling 38 vans on the 4N09 King’s Cross – Ardsley on 22<sup>nd</sup> February 1963, Archibald Sturrock worked the 08:15hrs goods ex Millerhill past Riccarton Junction on the Waverley route on 16<sup>th</sup> July. 12 days later it was re-allocated to Neville Hill shed, one of five A1s transferred to substitute for diesels on Leeds – Newcastle trains as well as covering Holbeck turns to



Hugh Lewelyn

Archibald Sturrock at Top Shed, King’s Cross in 1963.

Glasgow via the Settle and Carlisle line. Examples of the former are the 1S37 Leeds – Glasgow into Newcastle (from where, after servicing at Gateshead shed, it powered the 1S51 ex Hull forward to Edinburgh) on 10<sup>th</sup> August; instances of the latter include taking forward the Marylebone to Glasgow car sleeper from Leeds on 28<sup>th</sup> August and hauling both the down and then the up CTAC Leeds – Carlisle to Leeds on 27<sup>th</sup> June 1964. It was now often recorded on Gateshead shed for servicing although a trip south on 26<sup>th</sup> July saw it on New England shed. An evocative image of No. 60118’s power from this period is heading down Beattock with empty coaching stock after the Glasgow Fair holiday on 1<sup>st</sup>

August. After visiting Doncaster Works for repairs for many years, in September it entered Darlington Works, emerging nearly a fortnight later after casual light repairs including attention to a fractured cylinder. The end came for No. 60118 on withdrawal on 4<sup>th</sup> October 1965. Throughout its life this west Yorkshire-based locomotive only had five boilers, all to Peppercorn’s Diagram 118. In the following month it was sold to T.W.Ward of Beighton for scrap. **tcc**

*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.*

TORNADO TOUR DIARY - 2017/18

Below are the future operations Tornado is confirmed to be involved in. More details will be published on [www.a1steam.com](http://www.a1steam.com) as trains are finalised. Contact details for tour companies are below.

- **Wednesday 6<sup>th</sup> September** - ‘Belmond British Pullman’ – London to Bristol (return with No. 35028 *Clan Line*) – Belmond British Pullman
- **Sunday 10<sup>th</sup> September** – ‘The Torbay Express’ – Bristol to Kingswear and return – Torbay Express
- **Saturday 16<sup>th</sup> September** – ‘The Border Raider’ – Birmingham - Settle & Carlisle Railway **SOLD OUT**
- **Saturday 23<sup>rd</sup> – Sunday 24<sup>th</sup> September** – Barrow Hill Roundhouse ‘Pacific Power 2’ weekend
- **Saturday 7<sup>th</sup> October** – ‘The Tees-Tyne Express’ – Dorridge to Newcastle and return **SOLD OUT**
- **Saturday 25<sup>th</sup> November** - ‘The Chester Christmas Cracker’ - London to Chester and return (Tornado comes off at Bescot on the return which is completed with electric traction) - A1SLT promoted tour - bookings through UK Railtours
- **Saturday 24<sup>th</sup> February 2018** - The North Briton’ - Picking up at Cambridge, Ely, March, Peterborough, Newark Northgate, Doncaster.

<b>Belmond British Pullman</b> Tel: 020 3117 1300 <a href="http://www.belmond.com/british-pullman-train">www.belmond.com/british-pullman-train</a>	<b>UK Railtours</b> Tel: 01438 715050 <a href="http://www.ukrailtours.com">www.ukrailtours.com</a>	<b>Barrow Hill Roundhouse</b> T: 01246 475554 <a href="mailto:enquiries@barrowhill.org">enquiries@barrowhill.org</a>	<b>Torbay Express</b> Tel: 01453 834477 <a href="http://www.torbayexpress.co.uk">www.torbayexpress.co.uk</a>
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Crank web with stub axle and crank pin set up for assembly.

Wheelsets

The crank axle has been assembled by South Devon Railway Engineering and is presently with Unilathe at Stoke on Trent for finish machining (including turning the axle stubs to the finished size and machining the keyways). M Machine has manufactured the Cartazzi axle bearing retaining nuts and locking bars and the Cartazzi wheelset components have been sent to South Devon Railway Engineering for assembly. Completion is expected in the 3<sup>rd</sup> week in August. Specimens of cannon and axle boxes were sent to DLW in part finished state to go on display during 'The Talisman' visit and the Darlington P2 roadshow. They are now back with Timsons for finishing so that we are in a position to assemble the bearings and cannonbox onto the pony truck axle as soon as it arrives.

The static balancing of the coupled wheels took place on Wednesday 20<sup>th</sup> July with Andrew Hemming (of *Tornado* balancing and P2 load calculations fame) in attendance.



Crank web with stub axle.

All Images David Elliott



Above: Heating the second crank web. Temperature being tested with a wax crayon.



Above: Spacers in place on first crank web.

Right: Rob Le Chevalier and Steven Trenouth with the assembled crank axle.



The first wheelset has been assembled by South Devon Railway Engineering at Buckfastleigh, Devon. The Cartazzi wheelset had its wheels pressed onto its axle and its tyres are due to be shrunk onto the wheels shortly.





## Sand boxes

All six sand boxes are substantially complete and temporarily bolted to the frames. Ian has since made the filler pipes and covers. The whole lot will now be grit blasted, primed and the bottom flanges welded in (these had been left off to facilitate grit blasting and painting the inside of the boxes).

### Sand boxes in place.



### Driving sand boxes.



Above: Backward sand boxes.



Sand filler pipe to driving sand box.

## Frames

The brake hanger brackets are ready for fitting to the frames. Steve Wood is making the brake hanger pins. The frame stay and four spring hanger brackets fabrication is making progress at North View Engineering. The Cartazzi spring hanger brackets are fitted to the outer frames. The Cartazzi axleboxes have been set up in the hornblocks in readiness to measure the clearances and adjust as necessary.

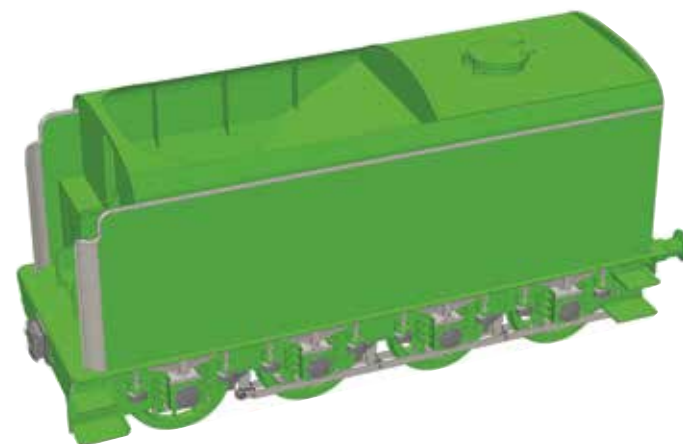
### Right: The Cartazzi hornguides and spring hangers in place.



## Tender

Following visits to DLW and a visit by us to their works, we appear to have landed a sponsorship deal with Cleveland Bridge to build the tender tank. The basis is that they will build the tank from materials supplied by ourselves on direct cost basis, i.e. not carrying full overheads. They presently have a set of provisional drawings and we are awaiting their quote. As quid pro quo we have offered to take apprentices on a similar basis as the Virgin lads. As indicated above the first two Cleveland Bridge apprentices are in DLW at the present time and are proving very useful.

Orders are about to be placed for tyres and axles for the tender which will enable the frames to be wheeled as soon as they arrive in about 18 months' time. The tank is presently programmed to arrive in about 24 months by which time the electrics and pipework foundations will have been installed on the frames, permitting the tank to be lowered directly onto the frames when it is delivered.



3D CAD drawing of No. 2007's tender.



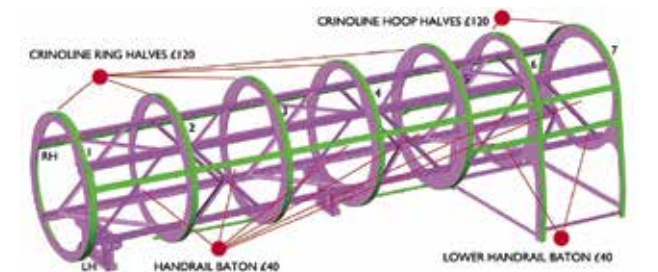
Nicknamed 'Craig the Cretaceous' by the Darlington team, this is the cladding assembly jig with crinoline rings and hoops attached.

## Cladding

Good progress is being made with the cladding. Ian Matthews has built the cladding assembly jig and with assistance from the two Cleveland Bridge apprentices, Michael Spence and Jack Morton, the crinoline rings are being fitted to the jig. 14 sheets of 2mm CR4 bright steel have arrived at DLW and with the assistance of M Machine's sheet roller, the sheets have now been rolled into half cylinders to form the cladding.



Above: 3D model of boiler cladding.



3D model of cladding assembly jig (magenta) with crinoline rings and hoops (green).



## Help Britain's most powerful steam locomotive to build a head of steam

**Join The Boiler Club today and help us to complete No. 2007 Prince of Wales in record time!**

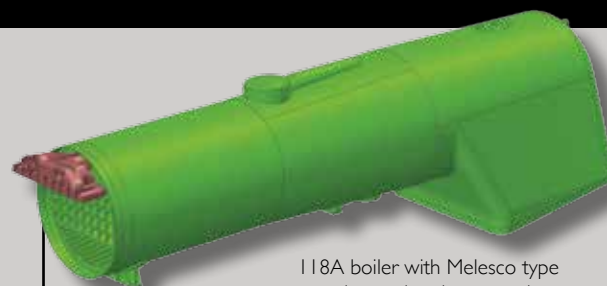


The boiler is the beating heart of a steam locomotive and to keep the construction of No. 2007 *Prince of Wales* on schedule for completion in 2021, we need to place the order for the boiler in 2019 for delivery in 2020. We have established The Boiler Club to fund the construction of *Prince of Wales*'s boiler. It is our desire to leave No. 2007 *Prince of Wales* debt free upon completion and therefore our aim is to raise at least £600,000 for The Boiler Club from 300 supporters each donating £2,000 to the project (in up to 40 payments of £50 by standing order) – we are almost half way there!

### Special benefits for members of The Boiler Club:

- Opportunity to buy ticket (seat already reserved) on one of No. 2007's first main line trips
- Reasonable access to No. 2007 at all times
- Opportunity to buy exclusive Boiler Club badge
- Opportunity to join one of the teams building No. 2007
- First choice of other components to sponsor
- Special limited edition version (signed/numbered) of the first official painting of No. 2007 *Prince of Wales* with No. 60163 *Tornado*
- Special Boiler Club day with *Tornado*

**Together we can build this remarkable locomotive - join The Boiler Club today!**



118A boiler with Melesco type superheater header as used on *Tornado*

### No. 2007's boiler in detail

- Use of diagram 118A *Tornado* boiler with detailed modifications to improve overhaul life
- Interchangeable with *Tornado* boiler
- *Tornado* boiler is 17in shorter than P2 boiler – No. 2007's smoke box will be extended within the cladding
- 250psi of No. 60163's boiler will be retained to improve economy and increase maximum power



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

For further information please visit [www.p2steam.com](http://www.p2steam.com) email [enquiries@p2steam.com](mailto:enquiries@p2steam.com) call 01325 460163 or write to The Boiler Club, P2 Construction Fund, Darlington Locomotive Works, FREEPOST RTJS-XECR-XARL, The A1 Steam Locomotive Trust, Hopetown Lane, Darlington DL3 6RQ

## P2 DEDICATED DONATIONS UPDATE by Mandy Grant

April to June has seen an incredible increase in component sponsorship, with 39 individual components being sponsored, raising a further £16,215.00 before gift aid. Sponsored components during this period have included the Live Steam Injector, Leading Coupled Wheel Tyre RH, LH & RH Cab Side Workplates, Front Air Pump Valve Body Casting on Steam Stand, 4 x Pony Truck Bearer Springs, RH Forward Driving Sandbox (Complete), 2 x Splashers, Rear Drag Box Wing Bracket RH machining, Driving Coupled Wheelset Roller Bearing LH Inner, a Driving Wheel Spoke and various Bolts and Handrail Knobs! We are most grateful to all of our supporters who have responded to the Dedicated Donations campaign!

Since its launch in 2014, 351 individual components have been sponsored as part of the Dedicated Donations Scheme, this is in addition to many of the smokebox components which have been sponsored directly by The Gresley Society Trust. Components sponsored through the Dedicated Donations Scheme range in price from one of over 1,000 driven Bolts & Nuts for £25, to the complete Exhaust Steam Injector for £15,000

If you would like to sponsor a component on No. 2007 *Prince of Wales*, or you know of a business owner or company who may be interested in sponsoring an item, please contact us at [dedicated.donations@p2steam.com](mailto:dedicated.donations@p2steam.com) **TCC**

## TENDER SPONSORED BY CLEVELAND BRIDGE by Mark Allatt

We are delighted to announce that Cleveland Bridge UK Ltd, Darlington-based global leaders in technology based engineering, construction and steel fabrication services, is to assemble the tender tank for No. 2007 *Prince of Wales*.

Cleveland Bridge has agreed to build the new locomotive's tender tank on very beneficial terms. They will fabricate the tender tank, the construction of which is like a lightweight box girder structure, from weathering steel plate as well as shot blasting and primer-painting the finished structure. The construction of the tender will take an estimated two years, with a break part way through the process for the tender tank base plate to go to the workshop of I D Howitt in Crofton, West Yorkshire to be trial fitted to the tender frames. This is the same process that was used for the tender built for No. 60163 *Tornado*.

The A1 Steam Locomotive Trust has agreed to provide a number of Cleveland Bridge apprentices with the opportunity



**Cleveland Bridge apprentices join the workforce at Darlington Locomotive Works.**

to assist in building No. 2007 *Prince of Wales*, providing them with experience in a different engineering environment. Overall, the sponsorship by Cleveland

Bridge is significant to the project and enables us to bring forward the construction of the tender by at least 12 months. **TCC**

## CRAFTMASTER PAINTS CONTINUE THEIR SUPPORT FOR THE TRUST by Mark Allatt

Cambridgeshire-based Craftmaster Paints Ltd, the leading traditional paint supplier to the UK's heritage restoration & inland waterways markets, is to supply the paints for No. 2007 *Prince of Wales*.

Craftmaster Paints has been a sponsor of The A1 Steam Locomotive Trust for almost a decade, providing free-of-charge the works grey paint for No. 60163's unveiling in August 2008, the LNER Apple Green paint for *Tornado*'s main line debut and naming in February 2009, the British Railways Brunswick Green paint in May 2011 and British Railways

Express Passenger Blue in November 2012. With the support of Craftmaster Paints, *Tornado* reappeared post overhaul in her iconic Apple Green livery in June 2015.

Craftmaster Paints has kindly agreed to supply the paints required for No. 2007 *Prince of Wales* on the same basis as those for No. 60163 *Tornado*, with the primers and undercoats at substantial discount and the top coats of LNER Apple Green and varnish free-of-charge. It is estimated that painting the P2 will require up to 14 gallons (60 litres) of each of the primer, undercoat and top coat. **TCC**



## •WORKSHOP NOTES•

### RAILWAYANA DONATION

Railwayana donated by a supporter (who wishes to remain anonymous) was sold for £4,870 at auction by GW Railwayana Auctions at Pershore High School, in Pershore, Worcestershire on Saturday 15<sup>th</sup> July 2017. The auctioneers kindly waived all seller's fees due to The A1 Steam Locomotive Trust's charitable status. The proceeds from the collection, which included Great Northern Railway and Great Central Railway builder's plates, will go towards the construction of No. 2007.

**The donated plates.**



Mandy Grant



**Boiler Club badge**



**Mikado Club badge**

Club badges available for £5.00 please send a cheque made out to 'The P2 Steam Locomotive Company' along with your delivery address to DLW'.

AISLT



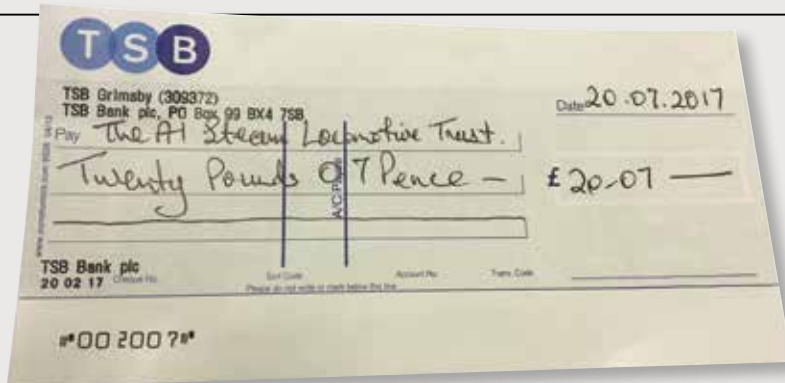
**Alan Golton, in the cab of a P2 at last!**

### 'CABBED' AFTER A 30,000 DAY WAIT

We were delighted to welcome 250 passengers from 'The Talisman' railtour to Darlington Locomotive Works on Saturday 6<sup>th</sup> May to view progress. On the train, hauled by *Tornado*, was one very special guest, 88 year old Alan Golton, who had waited 30,290 days to see and hopefully 'cab' a Gresley class P2. On a hot summer's day in June 1934 he was taken by his father to the L&NER open day in the station goods yard at Ilford, Essex, hoping to climb aboard No. 2001 *Cock o' the North* which was on display there. Alas, overcome by heat, Alan fainted and never did get to 'cab' his P2..... until this May!

### CHEQUE THIS OUT !

Gemma recently received a cheque (and accompanying raffle tickets) in the post with an unusual amount written on it. The cheque was made out for the amount of £20.07, the date was 20.07 and the cheque number was 0002007!! This caused amusement in the office and we thought it deserved a mention in TCC! Well done to Martin Bray for linking everything together.



## •WORKSHOP NOTES•

### AN APPOINTMENT WITH THE PRINCE OF WALES

A second group of engineering apprentices from Virgin Trains has joined the team in Darlington Locomotive Works to help with the construction of *Prince of Wales*.

As part of a sponsorship agreement with Virgin Trains, apprentices are being given the opportunity to experience a different railway environment at The A1 Steam Locomotive Trust's Darlington Locomotive Works, where Peppercorn class A1 No. 60163 *Tornado* was completed in 2008 and No. 2007 *Prince of Wales* is now under construction.

The second two apprentices, Scott Henderson and Andrew Patterson from Virgin Trains' Craigentinny depot in Edinburgh, have just completed a week-long stint with the Trust at DLW working on No. 2007 *Prince of Wales*. Over this period, they have worked with AISLT staff, helping with the shaping and fabrication of the locomotive's distinctive boiler cladding using the dinosaur-like former nick-named 'Craig the Cretaceous'. More apprentices are expected to follow in the coming months.

Speaking of the arrangement, John Doughty, Engineering Director for Virgin Trains on its east coast route, said, "While we look forward to introducing our new Virgin Azuma train fleet from 2018, it's important to promote and preserve the history and heritage of our east coast route. Our sponsorship of the Trust gives our apprentices the opportunity to experience a very valuable taste of the heavier side of railway mechanical engineering."

Mark Allatt, Trustee and P2 Project Director, The A1 Steam Locomotive Trust, commented, "The original Gresley class P2s worked the arduous Edinburgh to Aberdeen route for the LNER in the late 1930s, a route now operated by Virgin Trains East Coast. We are delighted that apprentices from Virgin Trains are now working with us to build No. 2007 *Prince of Wales* at our Darlington Locomotive Works, true inheritors

to the LNER's combination of speed and style. We look forward to welcoming many more apprentices to DLW over the next few years."



David Elliott

**Many hands make light work. Scott Henderson and Andrew Patterson seen here bending cladding supports - these being part of the crinoline structure which will attach the firebox side and top cladding to the backhead cladding.**

### P2 ROADSHOWS by Mark Allatt

As you will be aware, we are holding a series of presentations at major towns and cities along the route of the East Coast Main Line from London to Edinburgh and all the way to Aberdeen during 2017 and had travelled from London via Peterborough and Doncaster to York by the time of the last TCC.

Darlington: 72 attendees, so far four P2 Covenants worth £40pm (£3,360 over seven years plus GAD), an existing supporter increased his A1 and P2 covenants by £5pm each (A1 worth £300 over five years and P2 worth £420 over seven years plus GAD), and Dedicated Donations of £225 plus GAD.

Newcastle: 30 attendees, so far Dedicated Donations worth £1,225 plus GAD.

Edinburgh: 24 attendees, nothing donated yet, but Nina Brittan (volunteer and Sir Nigel Gresley's great-grand-daughter) recruited a member for The Boiler Club who had attended The Gresley Society Trust's plaque unveiling a few days beforehand and was at this meeting.

In addition, the LTM Patrons were hosted in Darlington Locomotive Works on 20<sup>th</sup> May – 24 attendees, one Mikado

Club (worth £1,000 plus GAD) and one £20pm P2 Covenant (worth £1,680 over seven year plus GAD).

The next roadshows will run from 11:00hrs to 13:00hrs on:  
**● Saturday 14<sup>th</sup> October 2017** – Dundee Heritage Trust Discovery Point, Dundee  
**● Saturday 25<sup>th</sup> November 2017** – Aberdeen Jury's Inn, Aberdeen.

The presentations are given by David Elliott and Mark Allatt and are also attended by other volunteers and supporters. Please do come along to support the project, hear the latest news and ask any questions that you might have. Even better if you can bring a friend or two!

We are planning to continue our P2 roadshows in 2018 but replacing some of the lesser attended locations with others from around the country, possibly including Bristol, Birmingham, Leeds and Manchester.

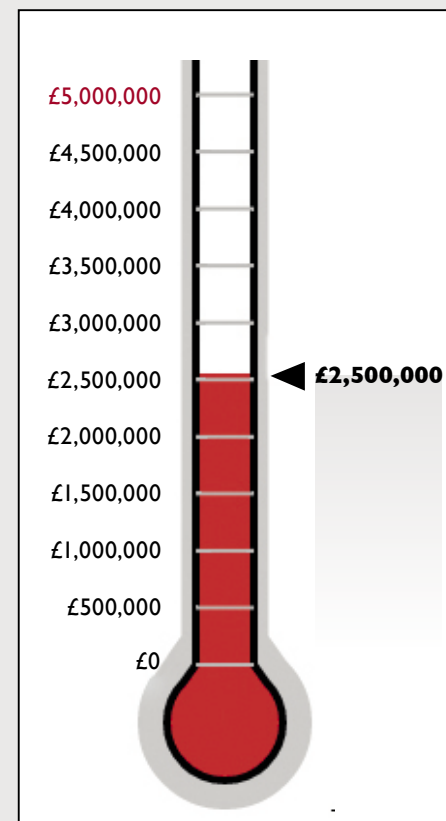
For more information on the P2 roadshows visit [www.p2steam.com](http://www.p2steam.com), email [enquiries@p2steam.com](mailto:enquiries@p2steam.com) or call **01325 460163. TCC**



## FUNDRAISING FOR No. 2007 PRINCE OF WALES by Mark Allatt

Record-breaking donations mean £2.5m pledged of £5m target

Mandy Grant



Pledged P2 fund now over half way.

Covenantors came to view No. 2007 taking shape at Darlington Locomotive Works in May this year.

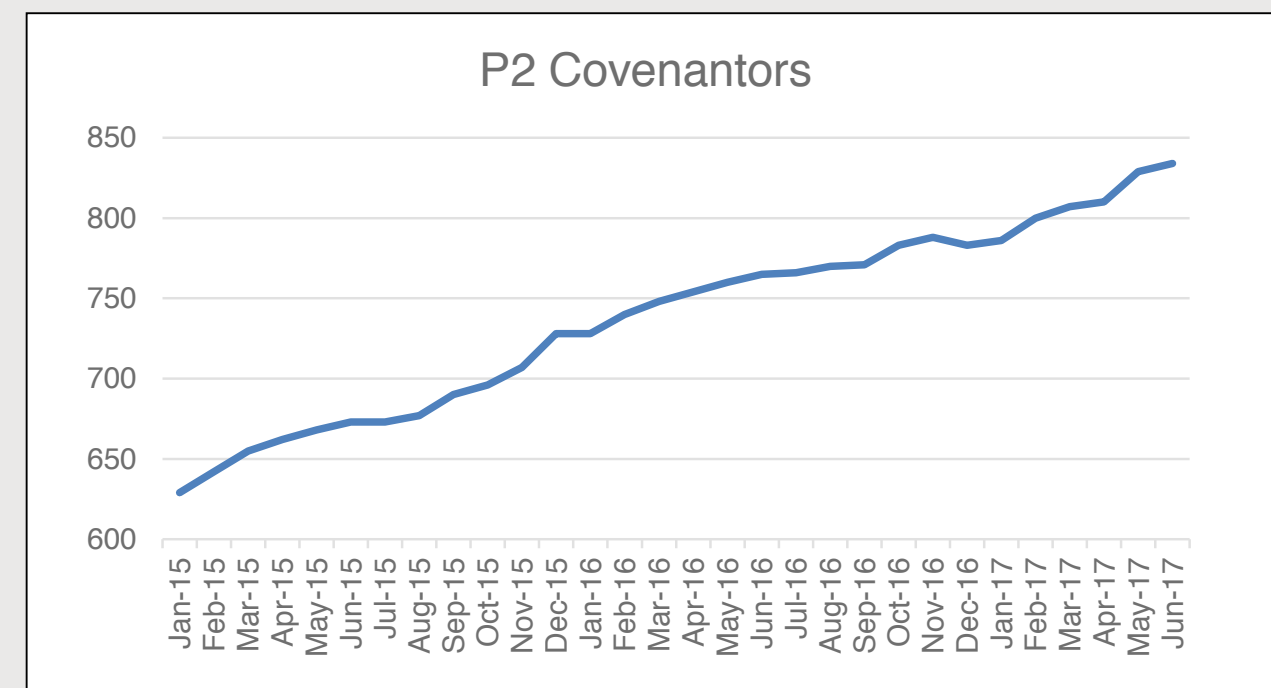
Our project to build Gresley class P2 No. 2007 *Prince of Wales* continues to make solid progress on all fronts and we are still on target to complete the new locomotive by 2021 provided we can keep up the current pace of income growth, indeed May saw a record total given to the project by supporters, with almost £90,000 donated and pledged. In addition to the expected monthly income of almost £12,000, May saw 24 new monthly covenantors coming on-board as well as one new member of The Boiler Club, 29 new members of The Mikado Club and over £5,000 donated in Dedicated Donations and general donations – if only every month was this successful! A huge thank you to all of our supporters who are giving most generously to the project.

Pledges towards building No. 2007 *Prince of Wales* have passed £2.5m just over three years after the frames were rolled at British Steel's plant in Scunthorpe. Public interest in seeing a new Gresley class P2 become a reality sooner rather than later remains high and over 830 people have already signed up to the 'P2 for the price of a pint of beer per week' (£10 per month or more) covenant scheme since its launch in March 2014. The average monthly donation is now £17.51 per covenantor (including Gift Aid) and the projected monthly income for our P2 project from the monthly covenant scheme is now running at 104% of that of *Tornado* – a remarkable achievement in such a short period of time - thanks to the generosity of our supporters. What is even more striking is that only 27% of all covenantors (36% of P2 covenantors) are regular donors to both locomotives, meaning that the overwhelming majority of the funds are being given by new supporters of the Trust.

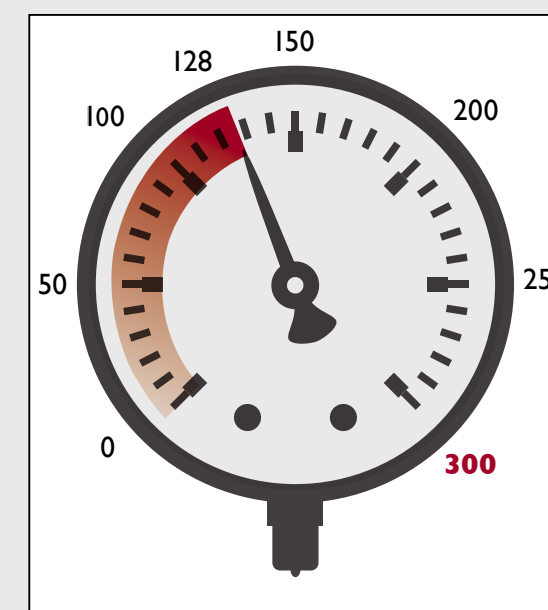
In addition to this core scheme, funds have been raised through The Founders Club (over 360 people have donated £1,000 each – target 100 people, now closed), The Boiler Club (over 120 people have pledged £2,000 each - target of 300 people – meaning half of £600,000 target now pledged) and Dedicated Donations (over £200,000 from existing supporters sponsoring a variety of components). The Gresley Society Trust has also sponsored the locomotive's distinctive front-end for which we are most grateful.

As you will have read in recent issues of *The Mikado Messenger*, the fickle hand of fate interrupted the otherwise smooth flow of components for the assembly of the wheelsets (with the keyways in the plain coupled axles being machined incorrectly) which means new axles have been supplied from South Africa. Although this has delayed the process of wheeling the frames of No. 2007, extraordinary progress on other fronts means that this will have no effect on the overall timetable and Darlington Locomotive Works will be far from idle for the next few months. We do however still need to complete our funding of The (extended) Mikado Club as soon as possible so that we can wheel both the engine and tender. As I write this article in late July we have already recruited 165 members (five over the original 160 target) to the club and are looking for just another 36 members to reach the new target of 200 – so if you haven't already joined please do consider coming on-board and help us to make a Mikado (with wheeled tender)!

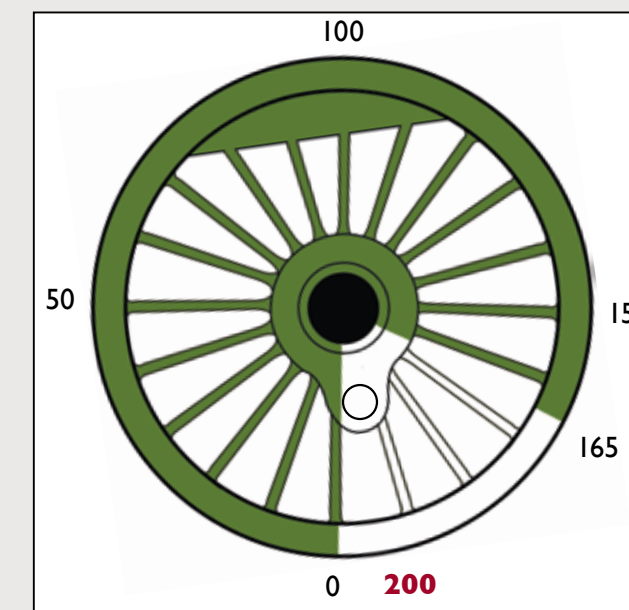
There are also a considerable number of wheeling-related Dedicated Donations still available for sponsorship, ranging from a driving wheel spoke at £600 (or from £25 per month for



Graph showing increase in P2 Covenantors.



Boiler Club Gauge (125 Members).



Mikado Club Wheel Chart (165 Members).

24 months) to a Cartazzi axlebox casting at £1,300 (or from £50 per month for 26 months) and leading coupled axle at £6,100 (or £100 per month for 61 months).

We are delighted with the level of support that the project to build Britain's most powerful steam locomotive has received since its launch. This means over £1.3m (over a quarter of the total required) converted into metal, around £1.7m (one third) raised and over £2.5m (50%) pledged.

We are now hopeful that we will have completed the rolling chassis for No. 2007 *Prince of Wales* in winter 2017/18 and we remain on-track for completion of the new locomotive in 2021. However, to maintain this rate of

progress we need to continue to raise more than £700,000 per year, which given the nature of the regular donation scheme becomes more challenging as each year passes.

We would encourage all our supporters who haven't yet contributed to this exciting project to help us to meet these deadlines by becoming a monthly covenantor, joining The Boiler Club, taking out a Dedicated Donation or subscribing to The Mikado Club. It's time to get on-board!

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





A colourised image of No. 2005 *Thane of Fife*.

The penultimate member of the original P2 class entered traffic on the 8<sup>th</sup> August 1936. No. 2005 *Thane of Fife* was like its sister locomotives built at Doncaster and gained the works No. 1840 and was equipped with boiler 8799. ‘Thane’ was the title given to a local royal official in medieval eastern Scotland, equivalent in rank to the son of an earl, who was at the head of an administrative known as a shire or thanage; famously Lord Macduff, the Thane of Fife, is a character in William Shakespeare’s *Macbeth*. Macduff plays a pivotal role in the play, suspecting Macbeth of regicide and eventually killing him in the final act.

After running in, the locomotive was sent to Scotland and was allocated to Dundee Tay Bridge shed where it remained for its entire life as a P2. As a locomotive, *Thane of Fife* was another variation on the P2 theme being almost identical to *Lord President* except that it was equipped with a single chimney. No. 2005 was the only P2 fitted with a single chimney underneath which was a 6in. blastpipe orifice. Some of the A4 class Pacifics were fitted with single chimneys equipped with ‘jumpers’, devices that allowed the strong blast of the locomotive exhaust to lift an outer casing

that increased the size of the blastpipe orifice. A decision was made to fit this device to No. 2005 in December 1938 with actual fitment taking place during a works visit in April 1939. With the jumper fitted and in operation, the blastpipe orifice on *Thane of Fife* could be increased from 6 inches to 6.25 inches.

No. 2005 was withdrawn for rebuilding as a Pacific on 26<sup>th</sup> October 1942 having completed 225,739 miles as a 2-8-2 locomotive. The engine was the first of the P2 fleet to be so treated and returned to traffic on the 18<sup>th</sup> January 1943 without

its nameplates. These were refitted over a year later in June 1944. The engine was run in and tested at Doncaster before being sent to Haymarket shed in April 1943. Whilst reporting to the Board, Thompson quoted that, “The converted engine has now been in service for some time and has proved entirely satisfactorily in that it has not only been able to carry loads at least equal to the stipulated maximum load of the P2 Class on the Edinburgh to Aberdeen section, but has also been remarkably free from mechanical trouble, so that it has been consistently



*Thane of Fife* rebuilt as a Pacific by Thompson and numbered 60505 by British Railways.

available for traffic.” Based on this report the Board authorised the conversion of the rest of the P2 class. However, all was not as good as it seemed, for although No. 2005 had required no work in the few months since conversion to the report being issued, the engine visited the works 45 times in less than 20 years during its life as an A2/2.

During its working life the engine carried a number of boilers. After rebuilding it carried its original P2 boiler, albeit with modifications. In March 1952 the engine was fitted with a brand new boiler No. 29872 before receiving boiler No. 29820 from engine No. 60154 in January 1954. During another works visit in October 1955 the engine gained boiler No. 29826

from locomotive No. 60149 before receiving its final boiler, No. 29786 from No. 60520 in September 1957. Originally the A2/2 class had been allocated the number 990-995 in the renumbering program. *Thane of Fife* received 994 on the 25<sup>th</sup> April 1946 and was the only A2/2 to carry any of these planned numbers. This was swiftly changed to 505 on the 12<sup>th</sup> May 1946. In June 1948 the engine was finally numbered 60505. In December 1949 the engine was transferred to New England shed, Peterborough where the locomotive saw out the rest of its working life before final withdrawal at Doncaster and scrapping after 673,464 miles as an A2/2. **TCC**

Below: No. 2005 *Thane of Fife* working a freight train south from Inverness.





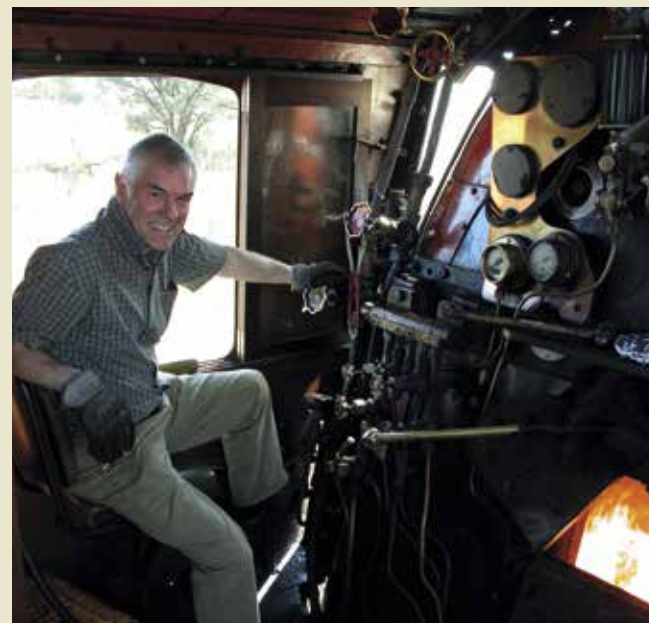
## PROFILE – RICHARD PECK by Graham Langer

A time-served railwayman, Richard was born in the Shedmaster's house in Woodford Halse in 1951; his father, John, had started his railway career as an LNER premium apprentice in 1938 before further training on the Longmoor Military Railway (following military service in WW2) before becoming a Shedmaster. After Woodford Halse he went to Annesley, and then in 1953 to Immingham. John will be well known to many through his association with the NRM and his work with the Steam Locomotive Operators Association. Richard's earliest memories (five to ten years later) are of being taken to the shed at Immingham on Sunday mornings, and left on the footplate of an O1 or an O4 2-8-0 with the footplate crew shunting the shed, whilst his father conversed with the Running Foreman on the plan for the next day or so. A move to Darlington in 1960 allowed close up views of A1s starting heavy trains out of the station, as well as the A4s and A3s passing on the fast lines.

Taking up a paper round in York in 1965, Richard used to time it so that he could watch trains at Challoners Whin Junction and Church Fenton before going home for breakfast and on to school. Most weekends and all the school holidays during the first half of 1967 were spent on the Bournemouth line, riding behind the Bulleid Pacifics before enjoying Black 5s and Britannias working out their last (until school exams and girls began to grow in importance). With the end of steam in the UK, there were frequent visits to France and Germany starting in 1968, with some rather wonderful locomotives. With his interest re-kindled, whole new worlds of main line steam railways opened up for Richard including East Germany, Czechoslovakia, Poland, South Africa and Turkey.

Starting work with BR in 1971 as a Mechanical Engineering trainee, steam had already finished and was to remain a hobby. Diesel training included spells at York Carriage Works, Doncaster Locomotive Works, Shildon Wagon Works, Ilford Electric Depot, Holbeck, Neville Hill and finally a supernumerary supervisor position at Gateshead Depot. Whilst at Gateshead, he was trained and passed out as Breakdown Supervisor with the 75 ton steam crane still in operation there at the time. His first substantive post was Senior Technical Officer at Gateshead, undertaking technical investigations and arranging modifications to the fleet of Class 31, 37, 40, 46 and 55 locomotives. In 1975, he was appointed Chief Maintenance Supervisor at South Gosforth where he was responsible for the maintenance of a large fleet of Diesel Multiple Units running commuter services around Newcastle.

In 1977 he was appointed Shift Production Manager at the new Depot at Bounds Green in North London being closely involved with the maintenance of all the express trains working in and out of King's Cross, by now HST's. In 1983 he moved to Thornaby Depot on Teesside as Traction Maintenance Engineer, becoming Area Mechanical and Electrical Engineer at the same location in 1985. Responsibilities here included maintenance and repair of locomotives, wagons and Plant and Machinery in the Teesside area. Sectorisation of the railway was gaining traction at this time, and great success was made with the introduction of 'dedicated' locomotives to the different sectors, in particular Railfreight Metals. Thornaby had a new underfloor wheel lathe and Richard remembers No. 30777 *Sir Lamiel* and No. 60103 *Flying Scotsman* having their tyres turned on this lathe, as well as a variety of local industrial locomotives.



Richard Peck

**The picture in South Africa shows No. 3442 during return from Victoria Falls to Pretoria in May 2008 at Magaliesburg. Earlier on this trip, the mechanical stoker failed whilst running through Botswana, and it was necessary to hand fire the 70 sq.ft. firebox until a new stoker engine could be fitted at Mafeking.**

1989 saw a move to Neville Hill Regional Railways Depot as Depot Engineer. At the time Class 155, 156, and later Class 158 units were still being introduced into service. In 1992 there was a move to Project Management. The Leeds North West electrification was pressing ahead, with a plan to introduce new Class 323 units from Hunslet. However, with privatisation looming Richard was asked to seek suitable second hand rolling stock; Richard identified Class 308 units as the most suitable trains which could be made available, a project involving the release and storage of these units from LTS, overhaul and update modifications at Doncaster Works two units at a time, driver training, provision of spares and training of maintenance staff. Privatisation of the railways led to roles as Technical Performance Engineer, Engineering Director, and finally Managing Director with North West Regional Railways / First North Western.

But the hobby remained! One benefit of Privatisation was of course that it also led to Open Access, which has allowed LNER Pacifics to return to King's Cross, Hitchin and Newcastle. What a wonderful world! And now there was even a brand new LNER Pacific - *Tornado*! Richard joined The A1 Steam Locomotive Trust in 2009, helping to set up the commercial arrangements with customers hiring out *Tornado*. Richard was Chairman of the Tornado Steam Traction Control Group from 2013. The responsibility of this group was to ensure close liaison between the Operating and Engineering teams, it was also responsible for operational and maintenance safety, documentation, certification, budgeting and control of costs. A change in the arrangements at the Trust has meant this post is no longer required. Richard remains an enthusiastic and active member of the Support Crew, helping to turn out *Tornado* in a clean and presentable condition for each appearance. **TCC**

## FROM THE ARCHIVES by Graham Langer

● **Summer 1997** – Work continued on the conversion of the old Hopetown Carriage Works into a building fit to assemble No. 60163, including restoration of the south wing with repairs to the roof and walls, replacement windows, lowering of the floor and installation of pits and securing the site. In other news British Timken, manufacturers of tapered roller journal bearings, came on board to supply the Trust with new bearings at very preferential rates. In addition to supplying the bearings the company also offered engineering support as required, without charge, to assist and advise with the fitting and operation of the bearings, a contribution the firm has also made to the P2 project.

● **Summer 2002** – A lot of work was being carried out on the frames, hornstays and cannon boxes to ensure everything was accurately aligned for wheeling the locomotive; the accuracy required revealed that the micrometer being used had to be stored on the frames to ensure it was the same temperature! *Top Link*, the AISLT house magazine, carried an article debating the use of cosmetic snap-head rivets on a welded tender; an idea rejected because to their vulnerability to thermal shock and the fact that the Darlington built A1s all had flush riveted tenders and thus were smooth-sided compared to the Doncaster equivalent.



**In 2002 much work was centred on accurately fitting the hornguides, hornstays and cannon boxes.**

● **Summer 2007** – The big story in 2007 was the fitting of the boiler to the frames; on 28<sup>th</sup> June *Tornado's* frames were rolled outside the works for the first time since they arrived and the boiler craned into place. Astoundingly, given the way in which the boiler had been sourced and supplied, it dropped straight in and fitted perfectly – a

tribute to the design and engineering teams. Over the next weekend, 30<sup>th</sup> June/1<sup>st</sup> July, covenantors enjoyed an open weekend at the Works to view this new marvel. Elsewhere, North View Engineering was close to completing the tender tank and Ian Riley's team were assembling the tender wheelsets.

● **Summer 2012** – We were able to tell the full story of another epic day out for *Tornado* with the Royal Train, this time originating in London before travelling via Kemble (to collect TRH the Duke and Duchess of Cornwall) before an overnight run up the Lickey incline to Bishop Auckland (via Chesterfield), back to Darlington, then on to Alnwick and thence to Edinburgh! By the summer, *Tornado* had already clocked up a dozen tours, many of them 'Cathedral Expresses', and visited the Llangollen Railway and the National Railway Museum for 'Railfest 2012'. At Darlington, carmine & cream paint was appearing on the support coach and its interior was being fitted out. In *The Communication Cord* Graham Nicholas continued his analysis of the Vampire computer model of *Tornado* and the 'construction' of a P2 for comparison. **TCC**



**In summer 2007, *Tornado's* boiler is lowered into her frames.**



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



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\* All information correct at the time of going to press late-August 2017. For up-to-date information and dates please check the website [www.aisteam.com](http://www.aisteam.com).

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Darlington Locomotive Works is normally open to the public on the third Saturday each month (11am – 4pm).

Access to the works is via Head of Steam: Darlington Railway Museum where covenantors are entitled to free entry. 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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