

THE COMMUNICATION CORD

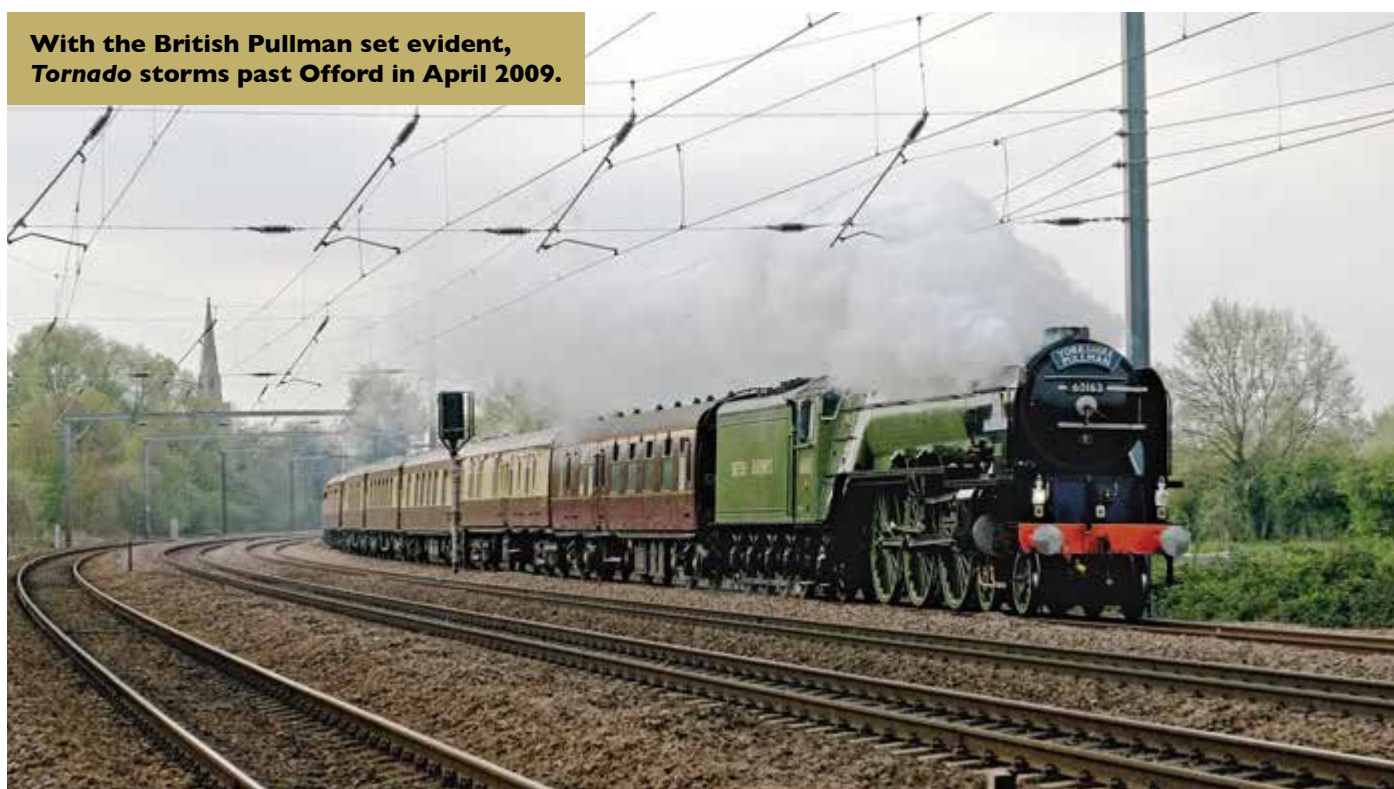


60163 TORNADO

New Steam for the Main Line

No. 37 Winter 2015

With the British Pullman set evident, Tornado storms past Offord in April 2009.



Ian McDonald

TORNADO TO WORK THE BELMOND BRITISH PULLMAN IN 2015

by Graham Langer

The AI Steam Locomotive Trust has won a prestige role for *Tornado* during 2015, haulage of the Belmond British Pullman.

No. 35028 *Clan Line* is to come out of traffic at the end of June this year for its ten year overhaul. Although its own locomotive will be unavailable for approximately twelve months, the Merchant Navy Locomotive Preservation Society is continuing with its role of

managing the provision of steam power for the Belmond British Pullman. To maintain steam on the British Pullman The AI Steam Locomotive Trust Ltd is to provide *Tornado* to stand in whilst *Clan Line* is away.

Chairman of MNLPS Tim Robbins commented, "We are very pleased that The AI Steam Locomotive Trust has made *Tornado* available to haul the Belmond British Pullman. We looking working with

them whilst *Clan Line* undergoes its ten year overhaul ready to return to traffic in 2016."

Mark Allatt, Chairman of AISLT added, "The Belmond British Pullman is perhaps the most prestigious steam hauled train in Britain and we are very proud to have been asked to provide *Tornado*. We look forward to working closely with the MNLPS and Belmond teams to ensure a successful period of operation." **TCC**

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From the chair by Mark Allatt



I'm writing this column just a day after the sixth anniversary of our momentous first to London King's Cross with 'The Talisman' from Darlington on 7th February

2009. What a day it was with thousands of well-wishers at the lineside and many more to greet us at King's Cross station. On this anniversary No. 60163 *Tornado* is still undergoing her intermediate overhaul in Darlington Locomotive Works and No. 2007 *Prince of Wales* is under construction alongside her – what a magnificent sight! And in the evening I was very privileged to be invited to the Heritage Railway Association's Annual Awards Dinner to receive a Special Award for a Meritorious Project for the P2 No. 2007 *Prince of Wales* project for our "excellent business

case and phenomenal rate of fundraising and early manufacture of components".

The award was presented by Dame Mary Archer DBE, the new chairman of the Science Museum Group.

2015 marks the 25th anniversary of the launch of the project to build a new Peppercorn class A1 with the launch meeting at The Railway Institute in York on 17th November 1990. The A1 Steam Locomotive Trust will be celebrating this milestone in several ways throughout the year. Most importantly we want to use it as an opportunity to highlight the importance of The 163 Pacifics Club – our desire to complete what we set out to do 25 years ago and purchase *Tornado's* tender (see page 5 for details). Although plans are still under development, these celebrations will include an Open Weekend in Darlington with both *Tornado* and *Prince of Wales* before the former departs for the main line, a dinner following our annual convention on 3rd October and a special train with *Tornado* to commemorate No. 60145 *Saint Mungo's* final run from York to Newcastle and return on 31st December 1965. More details will follow but please pencil these dates in your diary.

As you will recall, last year was very challenging for the Trust with regards to main line running. With *Tornado's* intermediate overhaul now well underway we are very much focused on getting this year's programme together and although still in

development, it is looking significantly better. And, as you will read elsewhere in this issue of *TCC*, we are delighted to have been chosen to stand in for No. 35028 *Clan Line* on the Belmond British Pullman whilst the MNLPS carry out her next overhaul. Her first outing with the luxury train will be 10th July. We need to make a success of running our own trains, such as 'The White Rose' on 2nd June, so please support this year's main line trains when they are confirmed.

As I am sure you have read in the railway press, our project to build Gresley class P2 No. 2007 *Prince of Wales* continues to gain traction with construction progressing rapidly on many fronts. The Founders Club has signed up almost 370 members since its launch at the AISLT convention in September 2013 – potentially worth up to £460,000 with Gift Aid added. We launched the 'P2 for

a price of a pint' covenant scheme at the first of the P2 Roadshows in London on 8th March and over 640 people have already signed up, worth around £910,000 over the duration of the project. If we add in the £100,000 pledged

to the dedicated donation scheme since its launch last July and 60 members of The Boiler Club so far our total pledged to-date has already reached £1.7m – but there is still a long way to go to reach the magic £5m.

It is vital for our future success that we continue to grow our supporter base by recruiting more people as covenantors for both *Tornado* and *Prince of Wales* and, thinking further into the future, I especially urge you to encourage any children that you know who share our passion for *Tornado* to join the *Tornado* Team.

Finally, I would like to pay tribute to Alexa Stott who has decided to stand down as a Trustee after many years of hard work. Many of you will know her from her role in organising our Annual Convention, her focus on Covenantor Care and her ever can-do attitude. Alexa has taken the tough decision to focus her time and energy on Barrow Hill Roundhouse and we wish her well in her endeavours.

Thank you all for your continued support. Your kind and often witty letters and emails always help to keep the team motivated. I hope to see as many of you as possible at our planned events in Darlington with both *Tornado* and *Prince of Wales* and on our trains in our 25th anniversary year. **TCC**



EDITORIAL by Graham Langer

2015 is going to be a special year for The AI Steam Locomotive Trust. Apart from the outstanding progress being made on No. 2007 and the welcome news that *Tornado* will be working the Belmond British Pullman trains, there is also the 25th Anniversary of the Trust to be celebrated. Nothing has altered our aim of building new ex-LNER steam locomotives for the main line, except that the existing fleet is another 25 years older and few are less than 60 years old! The tribulations suffered by the National Railway Museum in their ground-up restoration of *Flying Scotsman* is proof, if further proof were needed, that the long-term future of main line steam rests in the hands of those willing to tackle new builds - although six years on another standard gauge new-build has yet to take to the rails. *Prince of*

Wales is benefitting from far more than the Trust's fund-raising acumen. Reading this edition will reveal how improvements being applied to *Tornado*'s boiler will also help with that fitted to No. 2007, funding for which continues to pour in!

25 years have seen many changes in the composition of those supporting the Trust, some stalwarts who were there in 1990 are still going strong and others who have joined more recently continue to play vital day to day management and construction roles. Sadly in this issue we have to note that Alexa Stott is stepping down as a Trustee and from her covenantor care and sponsorship roles and handing over to Sophie James. We thank Alexa for all her efforts on behalf of the Trust and welcome Sophie to her new position. **TCC**

AI ENGINEERING UPDATE by John Wilkinson

Since the last edition of *TCC* much has happened. *Tornado*'s boiler was lifted and sent to Meiningen, the frames delivered to Darlington where they were further dismantled and the tender subsequently delivered as well. Here is a timetable of some of the highlights during this period.

- **27th October** - only three weeks after dismantling started, boiler lifted off and despatched to Meiningen with Allelys



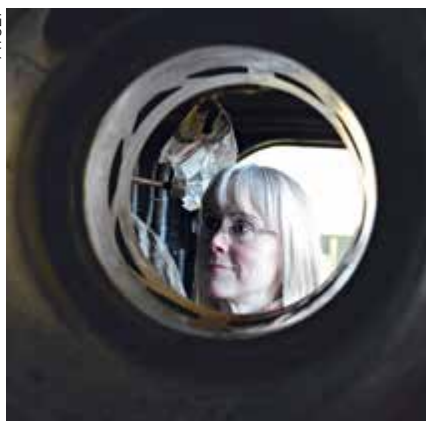
- **28th October** - Allelys move the locomotive frames back to Darlington Locomotive Works where they were built.

- **28th October** - worksite at Barrow Hill is cleared, we are very grateful for all the help and assistance received from Mervyn Allcock and his team at the depot

- **24th November** - visit by Timken engineer to check condition of roller bearings.

- **Late November** - David Elliott and John Wilkinson visit DB Meiningen Works with Bob Garnett who is the locomotive boiler to assess the condition of the boiler with the DB staff and agree the programme of work.

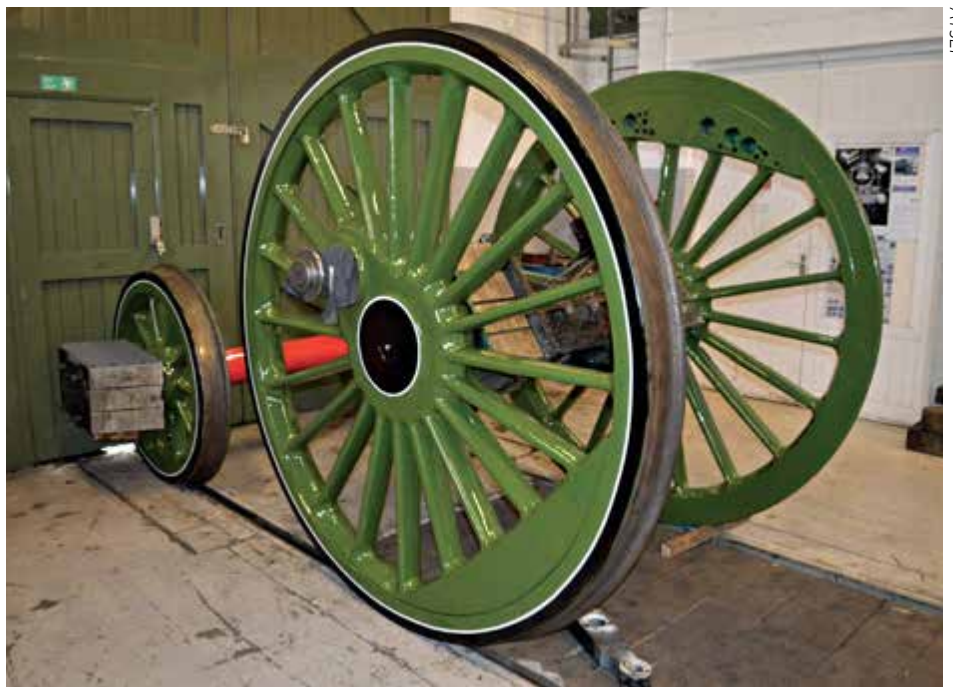
- **December** - During this period painting has commenced and as usual this is a lot preparation, when there are six, six foot eight inch driving wheels to rub down inside and out of each spoke this takes weeks and then there are the bogie and Cartazzi wheels to do as well. By Christmas top coat was being applied and *Tornado* is becoming an Apple Green locomotive once again. In the meantime the engineers have been engaged in many different refurbishment tasks for the reassembly which also commenced before Christmas.





● **13th November** - the frames are jacked up and bogie and wheels are removed from the frames. All along, we have a task certainly not glamorous but absolutely essential and that is component cleaning. The Trust has purchased a new component cleaner and this is helping keep the pace up.

● **January** - the main thrust has been work inspecting and checking the locomotive frames to ensure that they and the components attached are in good condition. Many components, for instance the bogie frame, couplings and middle big end strap, have been subject to inspection and testing and all have been found to be in good condition. The painting of the engine is now underway. The wheels have been prepared and painted apple green and lined out.



● **16th January** - the tender was moved to Darlington from Barrow Hill during mid-January and work has started on preparation for painting. In addition a number of other tasks will be carried out such as inspection of brake gear and replacement of some corroded pipework.

● **February** - the engine's frames have been deep cleaned and the paint rubbed down to make a suitable surface for re-painting. Component inspection and refurbishment has continued with items as varied as sizeable frame components to precision items such as the valve that causes the vacuum brake to apply in proportion with the air brake.



THE 163 PACIFICS CLUB – Time to get on-board!

In this our 25th anniversary year, we are focusing our fundraising for *Tornado* on the purchase of her tender. As you will hopefully remember, the tender is currently owned by William Cook Cast Products, the company owned by Andrew Cook and the Trust's Principal Sponsor. Andrew kindly offered to fund the construction of the tender in 2006, allowing funds being raised at the time to be spent on the engine.

The tender is leased to the Trust under a fifteen year loan agreement which will come to an end in 2021. *Tornado's* tender is a development of those built for the original Peppercorn class A1s with changes mainly down to the different operating environment on the modern Network Rail main line. Due to the lack of surviving steam infrastructure, water capacity is at a premium and so *Tornado's* tender carries 6,200 gallons, as opposed to 5,000 gallons, and 7½ tons of coal, rather than nine tons in the original A1s. The tender is also the home for many of *Tornado's* other unique features including an alternator, Timken

cartridge roller bearings (pre-greased sealed self-contained units which do not have to be fitted in enclosed axleboxes), Train Protection & Warning System (TPWS), National Radio Network (NRN) radio, Global System for Mobile Communications - Railway (GSM-R) radio, GPS tracker and of course the

mobile phone charger!

We need to raise £200,000 by 2021 to purchase *Tornado's* tender – thereby making the Trust debt-free - and finally completing the project we embarked upon 25 years ago. Following the success – thanks to your generosity – of our Regular and Dedicated Donation schemes for the construction of *Tornado* and the 'Use Your Loaf' appeal for the support coach, the Trust has decided to follow a similar route for the purchase of *Tornado's* tender. However, instead of "an A1 for the price of a pint" and "use your loaf", we've decided to raise the funds in a different way, The 163 Pacifics Club:

- We need to raise £200,000 to purchase *Tornado's* tender.
- Although *Tornado* carries the number '60163' - the next in the Peppercorn class A1 series following No. 60162 *Saint Johnstoun* – her pre-nationalisation LNER number would have been '163'.
- There were therefore 163 ex-LNER express passenger pacifics from the Gresley class A3s/A4s, Thompson class A1/I and Peppercorn class A1s. A numbered certificate (1-163) will record the details of your donation and the number/name of your favourite pacific.
- If 163 people were to donate £10 per month over the eight years until we need to purchase the tender (or alternatively make a one-off donation

of £960) with the addition of Gift Aid (£2.50 per month or £240 one-off) this would raise £195,600.

As with the previous schemes, this initiative comes with special benefits for those who generously take part:

- A numbered certificate (1-163) recording the details of the donation and the number/name of your favourite ex-LNER express passenger pacific from the Gresley class A3s/A4s, Thompson class A1/I and Peppercorn class A1s.
- Name inscribed on the official Roll of Honour in Darlington Locomotive Works which will detail the pacific sponsored.
- Entry into a draw for a main line footplate ride on No. 60163 *Tornado*.

Forms to join 'Membership of The 163 Pacifics Club' has grown steadily since its launch and around 30 of the available 163 ex-LNER express passenger Pacifics have already received new 'shed allocations'. It really is that simple! Help us to celebrate our 25th anniversary by sponsoring your favourite Pacific today and making *Tornado* debt free with her paid-for tender behind her by 2021. For more information visit www.a1steam.com, email enquiries@a1steam.com or call 01325 460163. Thank you. **TCC**

DIARY 2015

Right are the future operations *Tornado* is confirmed to be involved in. More details will be published on www.a1steam.com as trains are finalised. P2 events will also appear in this section with further details on www.p2steam.com. Contact details for tour companies are below.

- **30th May** – 'The Cumbrian Fells Express' Britsol to Appleby and return (*Tornado*, Crewe - Appleby - Crewe) - Pathfinder
- **2nd June** – '**The White Rose**' London King's Cross to York (with D9009) and return (with *Tornado*) – AISLT tour, bookings through UK Railtours
- **4th June** – The Railway Children Special – Belmond British Pullman
- **10th July** – Surrey Hills Excursion – Belmond British Pullman
- **8th August** – Surrey Hills Excursion – Belmond British Pullman
- **11th August** – 2nd September – Nene Valley Railway
- **11th September** – Surrey Hills Excursion – Belmond British Pullman
- **23rd September** – London Victoria to Bristol and return – Belmond British Pullman
- **6th November** – Surrey Hills Excursion – Belmond British Pullman
- **8th December** – Surrey Hills Excursion – Belmond British Pullman
- **12th December** – Surrey Hills Excursion – Belmond British Pullman
- **31st December** – York to Newcastle and return - AISLT Tour, details tbc.

Contact details

Belmond British Pullman
Tel: 020 3117 1300
Web: www.belmond.com/british-pullman-train

Nene Valley Railway
Tel: 01780 784444
Web: www.nvr.org.uk

Pathfinder Tours
Tel: 01453 835414
Web: www.pathfinder-tours.co.uk

UK Railtours
Tel: 01438 715050
Web: www.ukrailtours.com

'THE WHITE ROSE' EXPRESS RECREATED

**London King's Cross to York and return on Tuesday 2nd June 2015
No. 60163 *Tornado* and iconic
Deltic No. D9009 *Alycidon*.**

The A1 Steam Locomotive Trust is delighted to announce its first train of the 2015 season with the recreation of 'The White Rose' express. 'The White Rose' was the premier train from London to Yorkshire in the post-war period and this unique railtour will combine nearly 200 miles of travel behind No. 60163 *Tornado* and iconic Deltic No. D9009 *Alycidon*. Fresh from her intermediate overhaul and newly repainted into her glorious apple green livery *Tornado* will be hauling her second main line railtour of 2015 on Tuesday 2nd June 2015 from York to London King's Cross, taking over from *Alycidon* which hauled the northbound leg. We are pleased to confirm that the carriages will be in the historic carmine and cream livery and those passengers in premier dining on 'The White Rose' will receive a traditional silver service throughout the journey. We expect there to be much fast running with *Tornado* at her permitted maximum speed of 75mph and *Alycidon* at 100mph.

Heading north covering 189 miles along the East Coast Main Line, *Alycidon* will stretch her legs along the line she once frequented, taking in the magnificent sights of the summer countryside heading towards the picturesque and historic City

of York. A pick-up will be made along the way at Potters Bar. On arrival at York passengers will have time to explore the wonderful city, with its famous Minster and National Railway Museum, before boarding 'The White Rose' for its return leg to the capital hauled by No. 60163 *Tornado*. *Tornado* will be hauling a limited number of main line railtours during 2015, with all profits going towards the upkeep of the locomotive. Consequently, space on this train is likely to be at a premium and so an early reservation is recommended.

Terms and conditions are available on request.

Tickets for the 'The White Rose' are priced at standard class (£99.00), first class non-dining (£139.00) and premier dining (£225.00) with all profits going to

The A1 Steam Locomotive Trust. Tables for two in first class and premier dining are available for a supplement of £25.00 per person.

Mark Allatt, chairman, The A1 Steam Locomotive Trust, commented: "We are very pleased to announce our first main line railtour of 2015 with 'The White Rose'. *Tornado* will be fresh from her intermediate overhaul and newly repainted in her glorious apple green livery, so we anticipate that seats for this train will sell out rapidly. This is a classic Peppercorn class A1 and Deltic run from London King's Cross to York and return, offering magnificent sights and sounds that will accompany fast, express locomotives – steam and diesel – working hard... an experience not to be missed!" **TCC**

Provisional Timings for 'The White Rose' express on Tuesday 2nd June 2015 are as follows:

STATION	DEPART	RETURN
London King's Cross	09:15hrs	21:30hrs
Potters Bar	09:45hrs	21:00hrs
York	12:30hrs	16:30hrs

**Bookings by debit or credit card are via our ticket agents
UK Railtours on 01438 715050
www.ukrailtours.com or through www.a1steam.com.**

**Stretching her legs
on the East Coast
Main Line, *Tornado*
hauls the historic
'White Rose'
express.**



THE WINDS OF CHANGE THAT BECAME A TORNADO

by David Champion

The Origins of The AI Steam Locomotive Trust

Open any steam magazine and these days and a good proportion of the news will be relating to the standard gauge new-builds. It wasn't always this way. During the 70s and 80s the only topic was the restoration of this or that, and any talk of a new-build to fill a historical gap or create a new source of motive power to replace many old locomotives as they began their inevitable journey to the plinth, was greeted with derision and disbelief. Indeed, in some quarters, disbelief was only dispelled by *Tornado's* first runs in 2008.

How did we get from a 'restoration only' movement to a producer of brand new main line steam locomotives? It's funny what tricks the memory plays.

25 years on, the excitement of seeing the world's first scratch built main line express locomotive draw its first breaths outside Darlington Works in front of the world's TV cameras, then triumph after triumph, hauling its first passenger train on The Great Central Railway, the first main line run from York to Newcastle, the naming by TRH The Prince of Wales and The Duchess of Cornwall, hauling the Royal train, the first grand entrance into King's Cross station attracting the largest crowds ever seen there, the London to Edinburgh 'Race to the North' on *Top Gear* and many more.....had anaesthetised memories of the initial struggle to get the AI Project on the firm road to success.

There were three separate threads of development converging, which eventually met when Mike Wilson of Stockton went public in 1989/90.

Ian Storey, Locomotive Engineer from Morpeth in Northumberland (and owner of Black Five No. 44767) had seen the spare boiler for *Flying Scotsman* at Carnforth in the early 1980s. Could it be used as the basis for building the missing link, an AI? He enquired, but it was not for sale.

In the late 1980s, Mike Wilson had been involved in a project to gain recognition for Stockton station, then neglected but once the famous terminus of Stockton & Darlington Railway. Ways were being brainstormed to make the station more distinctive, and somebody suggested putting a replica main line locomotive on display. Mike reasoned, "Why not have a real one?"

Thirdly, in the mid 1960s, together with my brother Phil, we had watched with horror the decimation of our favourite locomotives, the East Coast Pacifics, and



The Launch of the AI Steam Locomotive Trust at York Railway Institute on 17th November 1990. The Founders: from left to right, Ian Storey, Mike Wilson, Stuart Palmer, David Champion. AISLT

were sad that not a single AI was listed for preservation. It all became too much when I read an editorial in *Railway Modeller* that said that the best way to preserve steam for future generations was to make small scale models of them. "No, it bloody isn't!" I shouted to my younger brother, "Mark my words, one day people will build brand new standard gauge steam engines". It seemed obvious to me that with the growth, even then, of heritage lines, new motive power would eventually be needed as older locomotives wore out.

And so I waited for it to happen. I watched keenly as Mike Satow built replicas of small locomotives, *Locomotion No. 1* in 1975, then in 1980 *Rocket*, *Sans Pareil* and *Novelty*. But although there were a number of proposals throughout the 1980's, no large 'modern' standard gauge project got off the starting blocks. By the late 1980s I began to think that it was blindingly obvious that through various restorations requiring renewal of this or that on a locomotive, the steam movement had actually commissioned the production of every single part of a main line standard gauge locomotive other than the frames and boiler. Even then, large new narrow gauge boilers had been commissioned for the Ffestiniog double Fairlies.

Then in 1989 speculation began in the now defunct weekly *Steam Railway News* of a large LNER design new build proposal. Mike Wilson was metaphorically about to light the fuse which would see all three lines of thought converge.

At first it appeared tentative, musing in public, should it be a Peppercorn class AI or a Gresley class P2 'Mikado'? As a fireman at Thornaby on the 1960s, Mike

had managed to fire a Peppercorn Class AI in service, could this be the perfect new build proposal? Mike convened a meeting at York to decide on the prototype.

Although attended by only half a dozen people, some of whom only stayed with the project for a short time, the decision was made to go for an AI.

Seeing the reports of this in *Steam Railway News* Phil and I became very excited, and thought this was our time to become involved. I phoned Mike on behalf of Phil and me, gave our backgrounds, and asked if we could help. Mike was at that time fielding all the enquiries with the aid of his late wife Carol, and was feeling his way with how to set up the organisation.

At a meeting at my home in Northumberland in June, Mike revealed that despite the high level of interest, things were still at a very formative stage. They had yet to find out how much it would cost, or who could supply the engineering input. Legal guidance had been sought about setting up a traditional enthusiast society, raising money was proposed by selling souvenir merchandise, and selling life memberships for £5 to the first enquirers.

My first reaction was that if it was possible to achieve a massive monetary target (such as the one that would be needed) with a traditional enthusiast organisation, and traditional methods of fund raising, it would have been done by now. Surely it needed a new kind of organisation in order to stand out instantly as being inherently capable of this seemingly impossible task? It would have to be a fully professional organisation, using people expert in their own areas and practising the best business methods. It would need a properly costed business plan which would show how the funds could be raised. For it is an undeniable basic first rule (still relevant) that unless you can raise the money, it's all "pie in the sky".

Mike's response was that as I was in business, could I pull together a business plan?

My first thoughts turned to pulling together a core professional team. Fortunately I knew Ian Storey through business, and it was easy to engage him in conversation about the AI proposal. Yes, he had been watching the press speculation and revealed his earlier approach to Carnforth. He agreed to contribute his engineering expertise to the project. I knew we needed a lawyer for the legal set up, and another business contact, solicitor ➤

Stuart Palmer joined as legal advisor. Phil would become the newsletter editor.

When Mike and Carol next came to Espley in July, I was able to introduce them to the founders of the management team. Mike agreed to become the first chairman, and I took on the role of project manager. I promised that when we next met in September, I would have a business plan ready to unveil to them which would show how we could build an AI from scratch.

Promising it was one thing, dreaming it up was another thing altogether!

One problem was that the nascent organisation had already started off selling life memberships at a one off £5 to encourage interest. The difficulty with this was that after sending them four newsletters they would start costing the project money instead of contributing to it. Another problem was that some of the early (and temporary) members had gone 'hell for leather' spending the projects modest early funds on commissioning souvenir merchandise to sell.

I strongly felt that this was an early rush down a headshunt, and fortunately Mike agreed with my rationale. Nevertheless it was still some months before we could stop some people ordering merchandise without authority, leaving us with bills to pay, and then there were some that offered this or that service at a concessionary rate because they said they believed in the project – only to find them presenting us later with an embarrassingly large invoice.

So in between restraining well intentioned (but unfocussed) marketing activity, there was the small matter of how to raise the million pounds (at 1990 prices) that it had been estimated would be the cost of building a brand new AI. I

tossed this and that idea around my head for weeks, but nothing clicked. It had to be an idea that combined serious large scale fund raising with the ability for the normal person to contribute at a level that didn't cause the supporter financial pain. A method everybody could understand and anybody could afford.

Then one warm summer's evening after supper, I felt in the mood for the ideas to come. Taking the balance of the bottle of red wine Gillian and I had enjoyed over dinner, I wandered into my study, set down the glass, and took out a single sheet of A4(!) paper. I wrote the heading "Build an AI", and over the next twenty minutes the whole plan seemed to just flood on to the paper, no doubt aided by the wine, but when I stopped writing and drained the glass I could see that it was all there, what kind of organisation, and more importantly how to raise the money by asking people to give the equivalent of a pint of beer a week.

A quick calculation had showed that the price of a pint a week, grossed up with tax reclaim as a charity, over a year would produce not far short of a £100. Over ten years that price of a pint would produce around £1,000. Therefore 1000 people covenanting the price of a pint would raise £1 million in 10 years. Surely there had to be at least 1000 people who would give the price of a pint of beer a week to see an AI again?

The thing about this that instantly appealed to me was that if the cost was greater over time (as it indeed proved to be through inflation and more accurate costing), there was constant cash flow allowing progress to continue. I remember pushing back my chair and writing on

the bottom, "this will work". From that moment onwards I never had any doubt that we would ultimately build the first British main line express locomotive in 50 years.

The September management team meeting was held at home at Espley, and I had prepared the presentation on a flip chart - this was some years before Powerpoint presentations using computers! There came the point in the meeting where the team asked me to give details of the project plan and I turned over the top sheet to reveal a large picture of a pint of beer. To the bemused faces I said, "I'll show you how we build a brand new AI for the price of a pint of beer a week". After the detail was spelt out it was agreed to adopt the project plan and go forward to a formal project launch at York in November.

It was important for marketing reasons to build a sense of excitement leading up to the launch, and so I drip fed expectations in the press, without revealing the method we were to use. Using the analogy of the Tallylyn's famous inaugural meeting, I fed the line that many people subsequently wished they had attended that pivotal meeting. It was impossible to go back, but people wanted to be a part of history in the making, the formal launch of The AI Project.

Mike Wilson suggested the Railway Institute in York as a suitable place for the launch, and arranged the loan of an AI nameplate from the NRM to add atmosphere. He also brought in the talented Ted Parker of Action North-East Video to do an audio-visual show to 'top and tail' the presentation entitled 'Visions of AI's', and Mike also recruited renowned Railway artist John Wigston to produce an artwork to give to Covenantors as they signed up.

I had gilt edged invitation cards made and Carol Wilson sent them to every person who had written to her expressing interest. 120 people confirmed they would attend, so we knew we had a good audience. They would cram into the room we booked that normally held 90 in comfort, promoting a good atmosphere - a bit of stage management it is true, but it worked. Press reports referred to a crowded meeting with people listening at the doorway, if we had used the other room that housed 300 seats, the press reports would have said it was a third full. It was vital that the world's first view of the AI Project would be 100% positive.

The day of the Launch arrived and we arranged to give an early presentation to Railway Press and some special guests at 11 am, with the public meeting at 2pm. The press presentation went well. Notably



David Elliott, David Champion, Wreford Voge, Peter Kelly, John Wigston.

Chris Milner of *Railway Magazine* instantly offered his assistance, and Allan Levy and Narissa Chakra of New Cavendish Books undertook to provide the project with 10,000 high quality colour marketing leaflets.

2pm arrived and the room was jam-packed. How would it go we wondered? Ted's very moving and evocative images of AIs in traffic set to striking music, ending with scrapyard scenes, set the scene as each member of the management team outlined what the organisation would look like, how it would operate using the best business principles, by people of proven business capability, and ending with the 'price of a pint' funding method at the end of which I signed the first covenant in front of the audience. The lights went down and Ted showed the finale of 'Visions of AIs'. And then..... there was complete silence for what seemed like an age, but probably was just ten seconds or so. A member of the audience said, "There's no doubt they are going to build an AI, they've got it all worked out!", then loud applause started. Covenant forms were eagerly filled in by many attendees, and at 100 we ran out of forms. We were on our way.

The following month saw very positive press reports of the launch which in turn led to increased interest from people who wanted to contribute, and just as importantly, more professional people wanting to join the team. Among these were Barry Wilson, a bank manager and chartered accountant from Jersey, David Elliott, then working in the aircraft industry but formerly a chartered railway engineer, and the much missed and revered Wreford Voge from Edinburgh, a former President of the Institute of Taxation and an expert in tax reclaim for charities.

As this was the days before email and the internet, large telephone bills were run up with discussions with the new members of the team, briefing them on progress to date, what roles they would play, and preparations being made for the London launch in April 1991. Updates on the project's progress were fed regularly to the press to 'keep the pot boiling'.

The northern members of the management team held a very enjoyable meeting on Saturday March 9th in the newly restored four wheel saloon once used by Sir Vincent Raven. We hired the saloon and indeed, a locomotive, for the day on the Tanfield Railway. After the conclusion of the meeting the locomotive hauled our coach to the level crossing adjacent to the Causey Arch pub. There the train was parked while we went to the pub for lunch with the crew, who kept an eye on the locomotive from the pub window. The cost of £50 for the special train



The first Covenantors meeting on the Tanfield Railway in 1991. The loco and coach are the same as used on the management team meeting in Spring 1991.

A I SLT

was split between those present - pretty good value for money and a foretaste of enjoyable AI events in the future.

Preparations for the London launch followed the same method as the York presentation, and so we knew in advance that we were expecting around 90 attendees at the Great Northern Hotel on Saturday 20th April. Peter Townend, the famed former shedmaster of King's Cross, got in touch to say he intended coming up from Torquay for the event, and agreed to allow his name to be used in connection with the AI project. Allan Levy came good with his promise to provide 10,000 full colour leaflets for marketing, and when he called me to say they were ready for collection, he came up with a suggestion from Narissa Chakra: as this was a brand new locomotive with a new identity, she suggested we name it *Tornado*. It instantly seemed right, as well as there being a number of connotations of the meaning, in its simplest form it was a great name for a locomotive capable of 100mph.

It is a little astonishing looking back that the first time the whole professional team that was to take the AI forward were actually together, was at that King's Cross meeting.

The London audience was very receptive. Ted Parker again started it off with his 'Visions of AIs' audio visual show. The Team (now including Barry, David and Wreford) expanded on progress to date and the project plans, including the proposal to name the locomotive *Tornado*. Peter Townend came up trumps answering technical questions about AIs in service, as well as dispelling a few commonly held myths. One questioner asked about the reputed bad riding qualities of AIs, to which Peter replied that while not as good a ride as an A4, it was better than a Britannia. At the conclusion of the meeting, more covenant forms were given out, and an offer of help with Marketing came from a young man in his twenties by the name of Allatt.

As the year went on the hard slog continued of gradually convincing people that our organisation was up to the job, and at each presentation more Covenantors joined. London was followed by the AI Roadshow going to Edinburgh on June 9th, and then Mark Allatt organised his first AI Roadshow at Farnborough Railway Society, bringing in yet more Covenantors, a good number of whom are still with us 25 years later.

By the end of 1991, we were a firm presence on the railway scene. We got universally supportive editorials from all the railway press as we chipped away at the huge mountain of disbelief and scepticism. As we gradually accrued more and more financial support, the complex task of putting together the engineering flow chart was quietly going on in the background.

There were many, particularly in the press, who expected us to go charging out and cutting a symbolic piece of engine as soon as we had a bit of money, but to this I always replied that we would start cutting metal when we were ready to start a continuous and orderly process of manufacture. It was when I eventually saw David Elliott lay on a table the printout of the engineering flow chart of tasks (which seemed to be about ten feet long), that it dawned on me that this was a plan not only for building an AI, it could be used for building any steam locomotive..... mmmmm!

In preparation of this account of a period which kicked off the ten most hectic and exciting years of my life, I am indebted to my brother Phil, who, as a historian, fortunately kept copious diaries of the events of the time. And the effort I was able to contribute was only possible with the support of my late wife, Gillian, who in those first ten years became an integral part of the AI project in her own inimitable way. Those who were there in those first ten years always recall her with affection. **TCC**



Tornado heads south at Hadley Wood with 'The Talisman' on 7th February 2009.



P2 ENGINEERING UPDATE by David Elliott

Design

Work continues with modification of frame stays as fabrications as opposed to castings, and to accommodate air pumps and air brake cylinders instead of vacuum brake equipment as fitted to the original locomotives. No. 2007 will have a vacuum brake capability using the same system as adopted for *Tornado*, where the brake is controlled via the automatic air brake valve on the locomotive, however a vacuum ejector creates a vacuum in the vacuum brake pipe for the train, the level of vacuum being controlled by an air/vacuum proportional valve to ensure that the brake force from the train brakes is equivalent to the brake force from the locomotive brakes.

With the success to date of The Boiler Club, we are starting to consider the definition of the boiler design. A basic assumption has been that the boiler for the new P2 shall be similar to and interchangeable with the boiler on *Tornado*, with detailed design improvements to increase life between major repairs.

A further detailed improvement is in the design and layout of the small oil pipes which run from the air pump lubricators in the cab to the air pumps between the frames. The pipe used for this is like car brake pipe and is conservatively rated for the pressures involved, however the small (6mm diameter) pipes have proved to be vulnerable to large tools being used between the frames on *Tornado*, so the decision has been taken to run the bundles of small pipes inside larger and heavier copper pipe which acts as a conduit and shelters the small pipes. With *Tornado* in pieces and the boiler off,

the modification is being retrofitted to *Tornado*. Compact quick release couplings for where the pipes appear in the cab have been designed and ordered.

Several updated manufacturing drawings have been prepared from the 3D models to enable machining of the 26 frame stays, brackets and hornblocks which is progressing satisfactorily.

The original P2 class had a propensity to break crank axles (at least four times in their short life as 2-8-2s) so some improvement has been made to the design incorporating the Timken A1 crank axle and some later detail from the BR BASS 504 wheel/axle design procedure. However we need to ensure that the new design is acceptable, so a contract has been placed with Mott MacDonald at Derby for their wheelset specialist Robert Morley to model the new crank axle design using Finite Element Analysis to assess the likely stress levels.

Valve gear

The original Lentz rotary cam poppet valve gear fitted to No. 2001 *Cock O' The North* had a number of problems which caused Sir Nigel Gresley to use Walschearts valve gear on the subsequent P2 locomotives and to convert No. 2001 in 1938. Our research suggests that subsequent developments with poppet valve gear would have overcome the problems experienced with No. 2001. We have choices:

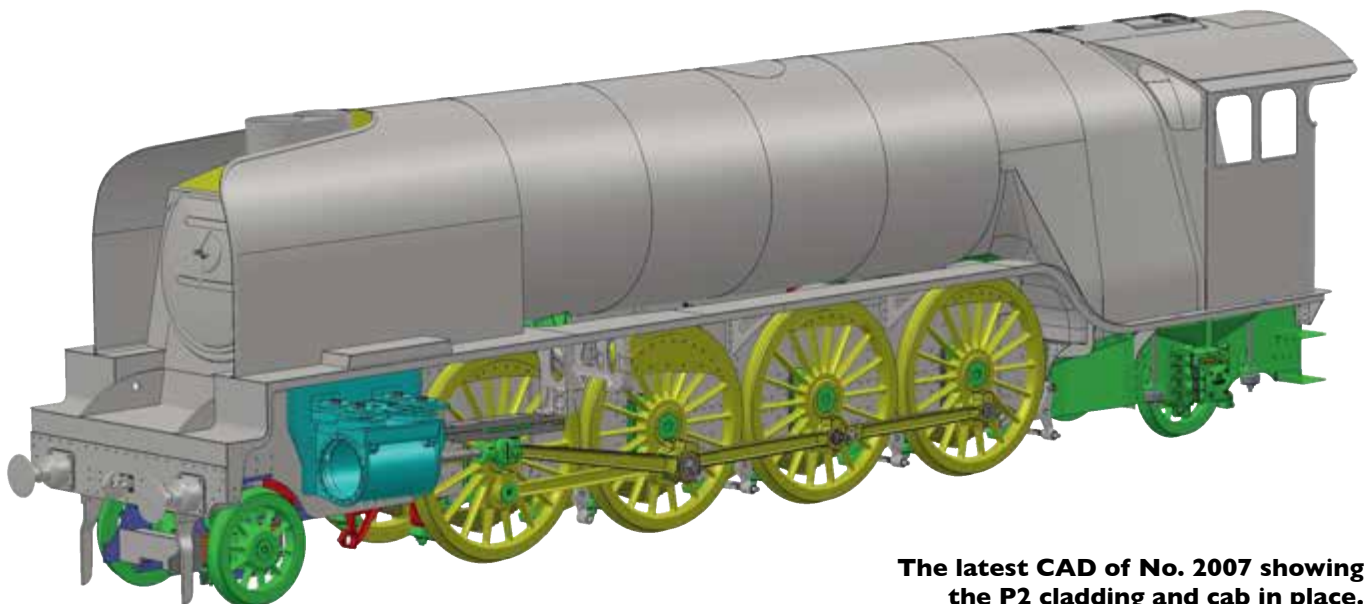
- 1) Adopt the British Caprotti valve gear as used on No. 71000 *Duke of Gloucester* and a batch of BR Standard 5 locomotives
- 2) Improve and develop the Lentz design to overcome the shortcomings
- 3) If the above are impracticable, fit

Walschearts gear

The use of Caprotti gear has two issues, firstly it is going to need major redesign to adapt it to the steeply inclined middle cylinder and secondly it represents a major change from the original P2 design which increases the risk of importing new unforeseen problems.

Thanks to the efforts of our researcher Andy Hardy, we have found a fair amount of correspondence between the LNER and the Associated Locomotive Engineering Company which supplied and held the rights to the Lentz gear. It would appear that the combination of the large cylinders and correspondingly large valves coupled with the small space for the cam actuating boxes on the top of the cylinders resulted in the stress levels in the drive system and cams being significantly higher than previous installations. This showed itself up on No. 2001 by rapid wear of the cams and followers, subsequently addressed by reverting to the earlier stepped cam design which had the effect of limiting the locomotive to seven steps for cut off. This did nothing to improve the already disappointing coal and water consumption for the engine!

There is little doubt that use of modern materials and heat treatments to produce extremely hard cams and followers would overcome the problem, however without extensive design and testing resources, the risk of introducing new unexpected problems is significant. Through the good offices of one of our supporters, who happens to be nearing completion of a beautiful 10 $\frac{1}{4}$ in gauge model of No. 2001 *Cock O' The North*, we were introduced to George Carpenter, a locomotive engineer



The latest CAD of No. 2007 showing the P2 cladding and cab in place.



Santa Fe No. 3752, fitted with Franklin 'B' type gear.

Vernon Smith archive

who worked with Chapelon and Porta and knew many of the later steam locomotive engineers including Bulleid and Stanier. George translated Chapelon's book 'La Locomotive a Vapeur' which was published by Camden Miniature Services in 2000.

George's knowledge of valve gears is encyclopaedic. He suggested that we researched Franklin type B valve gear from the USA, and produced excerpts from a book One Man's Locomotives by Vernon Smith who was deeply involved in the development of Franklin gear and subsequently with its fitment to a number of USA locomotives during the 1940s. The Franklin Railway Supply Company's two types of poppet valve gear ('A' and 'B') were derived from Lentz oscillating and rotary cam gears respectively and in the case of the type "b" rotary cam gear, used infinitely variable scroll cams throughout. Further development work improved the other weak points of the Lentz design.

The USA does not have a central national railway museum like our NRM, and research for drawings and information is more difficult. Fortunately George Carpenter knew Vernon Smith and was



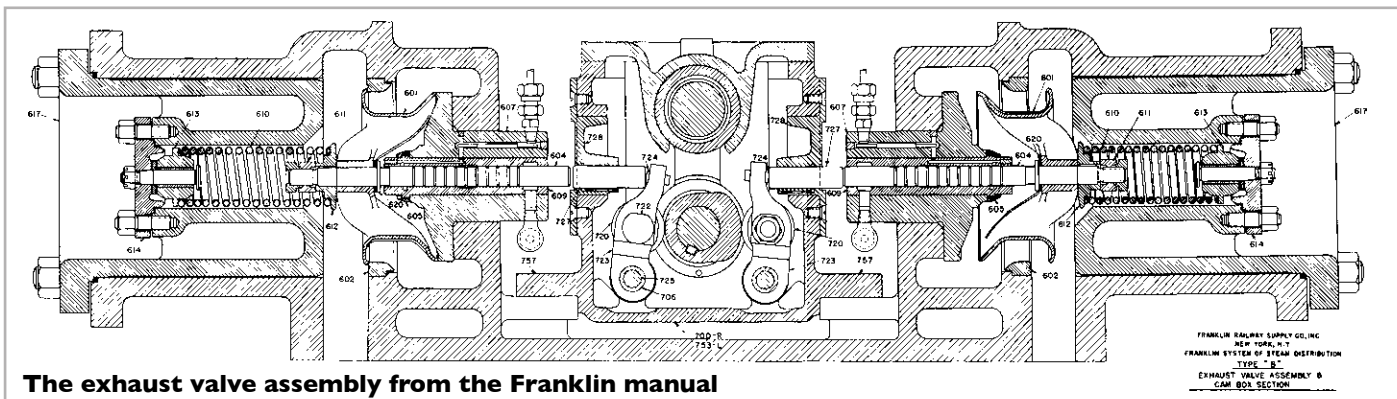
David Elliott examines the blueprint for the Franklin gear.

AI SLT

aware that his son Charles had some of Vernon's archives including details of Vernon's work in fitting the Santa Fe 4-8-4 locomotive No. 3752 with Franklin 'B' gear (see photo). Charles, who amongst other things is a railway artist, has proved to be most helpful lending us some drawings and two Franklin manuals for the type 'B' valve gear fitted to No. 3752. This has given us enough information to carry out detailed design of the valve gear and cylinders for

No. 2007, which will be the focus of design work over the next few months.

Scanning the drawings has been slightly problematical as the largest one is eleven feet long! Our local scanner can only cope with 8' long drawings, so the drawings have been scanned by passing them through from both ends to produce two partial scans which have been subsequently been recombined electronically. (see photo and drawing).



The exhaust valve assembly from the Franklin manual

Manufacturing

The first batch of a total of 1,054 driven and fitted bolts and self-locking nuts required to assemble the frames have been ordered to ensure that they are available when the first of the machined castings arrive at Darlington. Baker's Patterns have completed the next batch of polystyrene patterns which will be sent to William Cook Cast Products at Sheffield to join some more *Tornado* wooden patterns for axleboxes, front buffer bodies and other details.

A new pattern for modified steam shut off valve bodies for the lubricator atomisers and chime whistle has been ordered from South Lincs Foundry at Spalding as the valve bodies are being incorporated in the present boiler design improvements for *Tornado*. Tyres for the engine have been ordered from Ringrollers in South Africa via Railway Wheelset and Brake Ltd. WCCP have sent the coupled wheels to Pattinsons for proof machining.

The 24 frame castings delivered from William Cook Cast Products at Sheffield in the L Hunt & Sons Ltd P2 liveried curtain-sided trailer to Multi-Tech Engineering at Ferrybridge and North View Engineering

Solutions at Darlington where machining has started. Multi-Tech is also proof machining the pony truck, Cartazzi and tender wheel centres.

A further order for expanded polystyrene patterns for the next batch of steel castings has been placed on Baker's Patterns at Telford for the pony truck top centre casting (this fits to the frames in front of the cylinder block and carries the loads from the frames into the pony truck), the front boiler support which is another modified item derived from *Tornado* to enable the boilers to be interchangeable between *Prince of Wales* and *Tornado*. Also two patterns for the distinctive Spencer Moulton double spring buffers have been ordered. These will be sent onto William Cook Cast Products at Sheffield who will be manufacturing the next batch of steel castings which as well as the above items include the coupled wheel and Cartazzi cannon and axleboxes (which are the same as those on *Tornado* and therefore can use *Tornado's* patterns) and the three piston crossheads.

Boiler improvements

With *Tornado's* boiler at Meiningen for

its seven year overhaul (it was steamed for the first time on 11th January 2008), some of the detailed design improvement work for the boiler for No. 2007 has been brought forward to be incorporated in *Tornado's* boiler during the overhaul. The main improvements being incorporated are:

- 1) Increased use of flexible stays, particularly in the lower corners of the firebox.
- 2) Re-routing of the steam supply to the lubricator atomisers and the chime whistle. The standard LNER design for this has a live steam pipe coming through the front tube plate into the smokebox and appearing as a valve on the side of the smoke box. Up to the valve the steam is uncontrolled, ie the pipe is connected directly to the boiler. Given the very corrosive environment in the smoke box, there is a small risk that the pipe (which is partly steel and partly copper) might fail which would result in steam escaping into the smokebox with the resultant risk of a blow back of flame into the cab. By routing the pipe out to flanges on the side of the boiler with the shut-off valves bolted directly to the boiler, any leak will become immediately apparent and will not cause any untoward effects in the smokebox.
- 3) Fitting of two additional wash out doors near the front of the boiler. With the use of hard water (particularly in the south of England), a high level of water treatment is required to prevent the formation of hard scale which can be damaging to the fire box. However there is a side effect that the treatment can sometimes precipitate out as a fine powder where the water enters the boiler. On the LNER Pacific boilers the feed water enters the boiler through the injector control valves in the cab, and then passes through long internal pipes before being discharged into the boiler near the front tube plate. To assist mixing there are trays that look like pieces of half round gutter under the pipe outlets. These tend to accrete precipitated water treatment along with the smoke tubes near the front tube plate. The two new washout doors will enable us to clean this area properly during boiler washouts.
- 4) Forged foundation ring corners. At the end of 2010, *Tornado's* boiler suffered cracks to the foundation ring corners which necessitated removal of the boiler from the frames to renew them. The main cause was thought to be due to scale build up on the firebox causing it to become hotter than normal (scale is quite a good insulator). This caused greater than normal expansion and contraction in the firebox which in turn placed a greater cyclic stresses on the foundation ring corners resulting in fatigue cracking.

New corners were welded in and an

David Elliott



Eight driving wheels at Pattinsons, one shown on the boring machine.

David Elliott



Pony truck, top centre casting design.



improved water treatment regime has allowed the new corners to last longer, however there are some initial signs that cracks may be forming. When steel is cast the grain structure is fairly homogeneous, ie most of the crystal grains are of similar size and shape. When plate is rolled, it starts as a cast billet and is repeatedly run through rollers when red hot until it is the required thickness is achieved by which time it wider and a lot longer. This has the effect of stretching the grains in the steel in the direction it is rolled, which improves the fatigue strength in the along the axis of the grains. The foundation ring corners fitted to *Tornado's* boiler are cut and machined from boiler plate, however this results in the long grains in the steel being at right angles to the maximum stresses, which does not help in prolonging their life.

It is possible to control the direction of grain flow in steel by forging, and this is often used for manufacturing highly stressed components such as coupling and connecting rods. Forging involves hammering the hot steel to the required shape, and by careful control of the process the grain flow can be made to go in the optimum direction. After some searching, Brooks Forgings in the West Midlands have been contracted to produce tooling and make forged corners. As the tooling is a large part of the cost, we have ordered twelve corners, four for *Tornado's* boiler, four for No. 2007's boiler and four spares. The new corners are being made with extra metal on their upper edges and ends so that when they are used as replacements, they can be welded to fresh metal on the firebox. On a new firebox they will be cut back to the original size.

Fundraising for the P2

Pledges to the project have now reached a staggering £1.7m including Gift Aid. This includes 60 members of The Boiler Club which has already reached 20% of its 300 member target. Regular monthly 'covenanted' donations are already running at almost 75% of those for *Tornado* just 11 months after the scheme's launch (excluding The Founders Club, The Boiler Club and Dedicated Donations). **TCC**

GRESLEY TEAK COACH NO. 3188

by Graeme Bunker

The AISLT has acquired a 1934 LNER TK teak coach to the design of Sir Nigel Gresley. This purchase has been made in an advantageous manner thanks to the support of Covenantor and Founder Peter Lund, the coach's previous owner.

The coach is unrestored at present but is broadly complete externally and some restoration has been put in hand. In the first instance the vehicle will be moved to the north east for assessment and to enable a plan to be put in place for restoration.

As part of our wider activities, and with the second locomotive now well into construction, the Trustees are wishing to ensure that we have a wider focus than just the locomotives we have built and any that come into our care. An understanding of LNER rolling stock is part of that activity and having a teak coach enables us

to understand more about the engineering of the LNER. In due course decisions will be made on where to operate the coach and if further rolling stock might be purchased by the Trust. We will provide further updates on the progress with the coach in *TCC* and about fund raising and engineering initiatives.

Gresley coach No. 3188's body was built at York in 1934 as a seven compartment coach to diagram 155, lot 488. It is the only example preserved with entry to compartments via end vestibules. Delivered to the Southern Scottish section of the LNER, it worked in East Coast express trains. The frames were built in 1932 by Metro-Cammell, Wednesbury, Birmingham.

Latterly numbered 12934 and then re-numbered SC12934E, in 1961 it was taken out of passenger traffic and allocated to the Scottish Region Strategic Reserve Emergency Control Train. The story of these secret trains goes back as far as 1953 when planning for the eventuality of any future hostilities, included the moving of the district control offices and the construction of replacement static emergency control centres. Four years later the scheme was suspended, but in 1961 the idea was resurrected. A government grant of just under

£500,000 was made available for this programme, but when it became evident that the grant would not cover all costs, together with the fact that the Ministry of Transport favoured mobile controls, a decision was made to provide each of the six Regions then in being with two trains apiece, each train costing approximately £40,000. For its trains, ScR chose to use Gresley vehicles, but the eight coaches forming its two trains were converted from four types: Diagrams 40A (second brake) and 155 (second corridor), as well as vehicles of Diagrams 186 and 115.

All eight vehicles were withdrawn from revenue service during 1961/62, at either Cowlairs or St Rollox, with the exception of an open second, which was condemned at Thames Wharf on the ER and sent to Scotland for its new role. The coaches were modified at

Cowlairs Works, but remarkably enough the eight vehicles were not given departmental numbers and so carried their original numbers

complete with suffix 'E'. As a result, they did not appear on BR's TOPS computer system records. Nor for that matter, did they appear anywhere else for, to add a note of real mystery to this tale, BR had no official record of them! BR's Rolling Stock Library, where all records are kept and updated, had no official knowledge of the existence of the two ScR control sets, the individual numbers having been written out of the records many years earlier. Thus BR found itself owning eight vehicles for which there were no records which had to be taken on to the files so that disposal could take place - a fitting end to these secret Gresleys! This set was disbanded in 1980 and No. 3188 moved to Buckinghamshire Railway Centre at Quainton Road in 1982 after a period in store at Bicester. The vehicle is the sole example an otherwise unrepresented type of Gresley coach, that with the end vestibule side corridor layout and it is one, moreover, with shallow sliding ventilators. It was an equipment coach in one of the ScR trains, retaining four compartments and a lavatory but being rebuilt with a pair of double doors on one side. **TCC**

"to add a note of real mystery to this tale, BR had no official record of them!"

THE P2 ROADSHOW

by Mandy Grant

Mark and Mandy Grant have taken up the challenge of running the P2 stand at various public exhibitions. This is vital work to raise the profile of No. 2007 and we thank them and their team of volunteers for giving up their time in this way. Mandy tells us what was entailed.

The Leeds Model Railway Society Exhibition, Leeds Grammar School (25th – 26th October 2014) was to be our first stint at coordinating and exhibiting at an event. Mark and I arrived at 6pm on Friday evening to set up the stand, we had a good pitch in the reception hall next to the Wensleydale Railway group.

On Saturday, we arrived prior to the exhibition starting and met up with Keith Crabtree, one of our volunteers. On the stand we had a video presentation playing of progress on the project so far, various leaflets and an information folder which included some history on the P2's and up to date information on progress on No. 2007 *Prince of Wales*.

After a very busy start handing out leaflets and talking to people (which resulted in several new sign-ups and a great deal of interest, generally from members of the public) there was a steady flow of visitors coming and talking to us throughout the day. In the afternoon we were visited by Dennis O'Brien, who was the most senior visitor to the stand at 88 years old and he recalled with fondness and amazing accuracy his time spent working on the railways! Dennis started working for the LNER in 1943 at the tender age of 17 and started off as a labourer at Neville Hill depot in Leeds, he then trained and passed out as a fireman in 1945 post war, he remained in that role until he emigrated to Vancouver in 1957. He mainly worked the route between the Humber and Newcastle and reeled off over 20 different class of steam locomotives that he fired throughout his time with the LNER, many of them no longer in existence. He knew every single one by name and number and mentioned the Peppercorn A1's as his favourite class, he was regularly on No. 60117 *Bois Roussel* and No. 60126 *Sir Vincent Raven*, and No. 60127 *Wilson Worsdell*. He fired the Thompson "converted" P2s No. 2001, No. 2002 and No. 2003 and stated that they were ungainly at speed and gave a very rough ride, no-one liked operating them. He was so pleased that the trust is building a new P2 in its original guise and delighted with the progress made so far. He hoped that he will still be around to



Mark Grant, Jorge Gorman and Mandy Grant with the stand at Warley.

see the project through to completion!

On Sunday we were joined by volunteers Charles Tremeer and David Reed, it was a much quieter day but still plenty of interest, lots of leaflets handed out and another few covenantors signed up, so all in all a very productive and enjoyable weekend!

Our next outing was to the Warley National Model Railway Exhibition, NEC Birmingham (22nd-23rd November). We drove down to Birmingham in awful weather on the evening of Friday 21st November. After a late night we were up very early the following morning to take all of the equipment to the exhibition hall and set up. After various security and paperwork checks we made our way to the allotted car park to unload.

We met up with volunteers Jorge Gorman and Andrew Taylor and made our

way over to the stand. Unfortunately, it was a smaller space than we had anticipated but we worked around the confines of our stand and were ready to meet members of the public as the exhibition opened. The hall was vast and packed full of model railway layouts and exhibits, displaying scales ranging from T Gauge, right through to full sized steam locomotives along with every scale imaginable in between.

As with the previous event, there was considerable interest in the P2 project, many people stood and watched the DVD presentation, we handed out a huge amount of literature, spoke to lots of people about fundraising, progress so far and the team involved in designing and building No. 2007; we signed up several new covenantors with others going away saying they would be filling in the application forms upon their return home. At 6pm the exhibition closed to the public and we tidied up the stand ready for the following day. After 10 hours on our feet, we went back to our respective accommodation for a well-earned rest!

On Sunday we were joined by volunteer Jorge Gorman, the day proceeded pretty much in the same vein as Saturday, very much interest was shown in the project and lots of leaflets handed out, however unfortunately we didn't have the same take up on covenants on this occasion. The exhibition closed at 5pm and then it was all hands on deck to get the equipment packed up and loaded into the car. We said goodbye to Jorge and made our way back to Leeds, tired but pleased that we had all managed to speak to so many people and raise awareness of No. 2007 *Prince of Wales*! **TCC**

Mandy Grant



Dennis O'Brien at the Leeds Exhibition.

MERCHANDISE UPDATE *by Gill Lord*

It has been very quiet since the convention; we did have good Internet sales leading up to Christmas so thank you to those of you used this way of purchasing our merchandise. Over the next few weeks I will be assessing our merchandise operation, the best sellers will stay but be re-vamped, items that are not so popular will be discontinued.

Attention P2 Founders and Covenantors! I still have ties available to purchase at a cost of £20 plus £2.50

60163

FOR SALE

SMOKEBOX NUMBERPLATES

£200 each including a commemorative plaque and postage and package

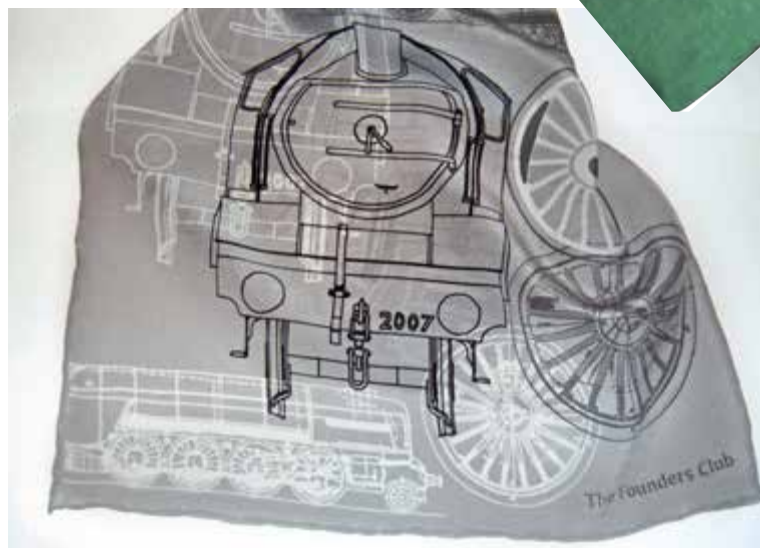
- **3rd July 2011** 'The Torbay Express'
- **17th July 2011** 'The Torbay Express'
- **23rd March 2013** 'The Cathedrals Express' - London Paddington to Kingswear
- **21st June 2013** 'The Cathedrals Express' - Tonbridge to Ely
- **9th July 2013** 'The Cathedrals Express' - London Waterloo to Swanage
- **7th September 2013** 'The Cathedrals Express' - London Waterloo to Cardiff

Email: shop@alsteam.com
for more details

package and postage, all you have to do is send a cheque payable to 'AISLT - P2 Construction Fund' to Darlington Locomotive Works, Hopetown Lane, Darlington, DL3 6RQ quoting your Founder or Covenantor number. Ladies scarves are available to purchase, the same price as the ties. Both items are made in the UK.

Founders still have the opportunity to purchase a specially commissioned R.E.V Gomm badge of No. 2007 *Prince of Wales*; these badges are numbered to coincide with your Founder number. To obtain your badge, send a cheque for £8 to the address above quoting your Founder number.

Any numbered badges unsold at the end of May 2015 will be put on general sale to P2 supporters. **TCC**



THE BOILER CLUB

Following the success of The Founders Club, which was designed to get the P2 Project to the point of cutting No. 2007's frames, we have decided to establish The Boiler Club to fund the construction of *Prince of Wales*'s boiler. 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 £460,000 from 370 donors. 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).

Special benefits for members of The Boiler Club:

- Opportunity to buy a ticket (seat already reserved) on No. 2007's first main line train
- 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



Chris Ludlow unveils his new painting.

- 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*.

For more information visit www.alsteam.com, email enquiries@alsteam.com or call 01325 460163. Thank you. **TCC**

Rob Morland

PROFILE – ALEXA STOTT *by Graham Langer*

At the beginning of 2015 Alexa Stott announced her intention to stand down as a trustee of the AISLT after many years involvement.

By her own confession Alexa is not from a railway background (being given a Hornby train set for her first birthday probably doesn't count). However, born and raised in Settle, with the world famous Settle & Carlisle railway literally on her parents' doorstep, she had many childhood encounters with steam locomotives and was always fascinated by their sheer size and power, smell and noise. Having spent several years in merchant banking in the City of London, until Alexa started work at William Cook Cast Products, the occasional visit to the National Railway Museum or a preserved railway with her children was about as far as her interest in railways went.

She had worked for Andrew Cook, Chairman of the company, for about a year and had noted early on, probably because it was at the front of the cabinet, a file labelled "AI Trust" but had had no reason to check its contents. A trip to one of the William Cook subsidiaries at Stanhope changed all that. On the return journey, the meeting there having finished early, Andrew announced that he wanted to check on the progress of a project the company

was involved in. It took a while to find a nondescript grey and brown building in a suburb of Darlington before being ushered through an unremarkable green door for the first time, avoiding the low ceiling, seeing machinery and lights through a doorway ahead of her and then....a steam engine, a HUGE steam engine hidden away from the public gaze, a sleeping giant.

Alexa's first meeting was not with a complete engine, however, far from it. At that point *Tornado* had no boiler, no tender, only a shell of a cab but looking up at the smoke box and along the line of the frames and those enormous driving wheels and she was smitten. It wasn't long before Mark Allatt realised this too and suggested that it would be helpful for her to act as a liaison between the company (WCCP) and the Trust. The position of Trustee soon followed, in her own words, "He's a very persuasive man that Mr Allatt!"

Alexa took on the roles of sponsorship coordinator and covenantor care, work which involved many hours of voluntary effort. Subsequently she also acquired responsibility for the 'Tornado Team' for younger supporters of No. 60163. Her association with the AISLT has certainly been a roller coaster ride; exhilarating, at times frustrating, but never dull! There were so many special

moments that she treasures and picking some out to share was a very difficult task. There were many public events she shared with this very special engine but it is perhaps the private moments within them that Alexa holds dearest, selecting the following:

Being responsible for the first ever eggs and bacon on the shovel from *Tornado's* firebox during the steam test – apparently they didn't taste at all bad.

- Sharing a few tears with the much missed late Malcolm Crawley as they witnessed *Tornado* move for the very first time under her own steam during the secret pre-launch test. Malcolm was responsible for much of Alexa's 'education' in all things steam; she says she had a lot of catching up to do and he was a wonderful teacher.

- Arriving at King's Cross for the very first time with *Tornado* and, after her initial stupefaction at the size of the crowds, hanging onto the cab rails for dear life shaking a bucket for donations. Alexa has never been one to miss a fundraising opportunity!

- *Top Gear* and for the first and probably only time in their lifetimes, in my children's words, she was 'cool'! Alexa claims, however, that her heart still hasn't recovered from the sight of the helicopter filming the 'Race to the North' hedge-hopping alongside the moving train. She was convinced the trip would be memorable for all the wrong reasons.

- The honour of travelling on 'The Winton Train', sitting with some of the Kinder Transport Children and hearing at first hand their stories and then listening to the haunting sound of *Tornado's* whistle echoing around Liverpool Street Station as she reversed out.

However Alexa's favourite memory – and the one that brings this story full circle – was being on the footplate as *Tornado* tackled the Settle & Carlisle for the very first time. And yes, she says, there were more tears of pride as she flew through Settle and up into the hills. Alas, it was back to earth with a bump as she nearly got left behind at Appleby. In a daze after coming off the footplate, she didn't hear the instruction to get into the support coach and wandered off down the platform

Now heavily involved with Barrow Hill Roundhouse, Alexa remains a Covenantor and I am sure we will continue to see plenty of her at future A1 and P2 events. **TCC**

Graham Langer



Alexa poses with *Tornado* while the locomotive was being painted at the NRM during December 2008.

FROM THE ARCHIVES by Graham Langer



Representatives of the Trust and RAF personnel at Tyseley in 1995.

● **Winter 1995** – *Tornado's* profiled, erected frames were unveiled to the assembled media at Tyseley and all the driving wheels had been cast. Negotiations with Darlington Borough Council led to the offer of the former Hopetown Carriage Works as a base for the Trust and at a press conference in March it was announced that No. 60163 would be assembled there. Dorothy Mather was presented with the ceremonial key to what was to be known as Darlington Locomotive Works.

● **Winter 2000** – By this time the bogie frame plates had been assembled, the smokebox bolted down to its saddle and one driving wheelset had been machined at Bridgnorth. Work on the motion was continuing with the delivery of the slidebars to DLW and the casting of the crossheads. In other news a decision had been made to part with the tender frames (originally under No. 4472's second tender) and these had been delivered to Flying Scotsman Railways at Southall – No. 60163's being an all-new fabrication to allow the fitting of roller bearings. In *The Pioneer*, David Champion recorded the tenth anniversary of the Trust and noted the reasons for its continued success.

● **Winter 2005** – The Trust was able to record significant progress by the time the February edition of *TCC* was published. The order for the boiler had been confirmed by Meiningen and over 60% of the Bond issue to finance this component had been subscribed to. Meanwhile, at DLW, work was proceeding on the footplating, including the little oiler hatches omitted from the original AI drawings! Ufone Engineering continued to machine parts of the valve gear and work had started on making patterns for some of the tender's components.



By the beginning of 2005 *Tornado* was sitting on her wheels at DLW.

● **Winter 2010** – The year could have had a better start, problems with firebox stays had forced the removal of *Tornado's* boiler and its despatch back to Meiningen for rectification, lifting the boiler having been conducted at the National Railway Museum in bitterly cold weather. However, *TCC* No. 21 was able to report that the 2009 season had concluded well with No. 60163 marking Armistice Day and working the VSOE Pullmans again, as well as a massive three day tour for Steam Dreams, 'The Christmas Coronation'. In other news Hornby released their 00 gauge model of *Tornado* and work on the support coach was progressing well at Darlington Locomotive Works, a successful fundraising campaign having exceeded a third of the cost by this stage. **TCC**

The A1 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 on 10th March 2015. For up-to-date information and dates please check the website www.a1steam.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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