

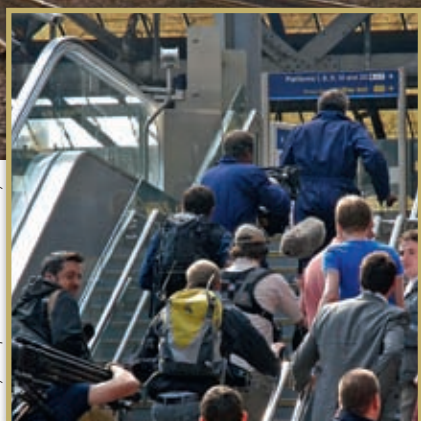
# THE COMMUNICATION CORD



The AI Steam Locomotive Trust  
New Steam for the Main Line

No. 16 September 2009

## 'TOP GEAR' TORNADO!



**'AI' 60163 Tornado races past Lolham Bridges with BBC TV 'Top Gear' "Race to the North" special. 25 April 2009.**

**Above: Jeremy Clarkson runs to the Balmoral Hotel after his arrival at Edinburgh – but there's a surprise waiting for him!**

*By Graeme Bunker*

As has now been widely seen across the UK and the wider world *Tornado* has reached even greater stardom with its appearance in the "Great Race to the North" on the BBC's 'Top Gear' programme.

The background to the race came from a dinner meeting when Mark Allatt, Tony Streeter, Danny Hopkins (editor of *Steam Railway*) and I discussed that a 'Top Gear' race would be a fabulous idea, for both publicity and being great fun. The big problem was how to make it happen, you don't just ring up and book a spot. This was where the team effort came in with Danny using his contact from a previous

motoring job to contact the producers and by a grand coincidence a friend and colleague of mine had shares in a horse with Jeremy Clarkson's wife! The final piece of the jigsaw was a chance meeting I had with the commissioning editor of 'Top Gear' commuting into London. I had 30 minutes with him just after we had painted *Tornado*, and bizarrely he was then going to a meeting with the 'Top Gear' team. From there the ball started rolling and a meeting was requested and the enthusiasm and momentum was unstoppable. There would be a race, 1950s style, between the new AI and the old AI!

Fast forward to the afternoon of the 24 April and *Tornado* is being quietly



Welcome to this edition of *The Communication Cord* - my first as Editor. How I became Editor I will reveal later but first let's look at *Tornado*. You will see



and read elsewhere of *Tornado's* continued outstanding performance and I want to share with you my recent experience behind it of 9 August on the 'Torbay Express'.

An early start from Hampshire to get to Bristol was handsomely rewarded by the magnificent site and sound of *Tornado* entering the station. Crowds had gathered and there was hustle and bustle on the departure platform as people sought their seats, went to the head of the train to see *Tornado* close up or jostled (literally) around our Merchandise trolley which had been doing good business for a while.

The efforts of station staff and tour stewards to get off on time were thwarted by the announcement after departure that, due to a points failure we would be stopping at Taunton only to pick-up and so making a water stop at Tiverton. Suffice to say the points weren't broken when we got to Taunton because we were looped by a 125. However due to "overrunning engineering work" we were both held for some time, *Tornado* leaving at virtually the time allotted had we taken on water! So with additional time still to be lost for water at Tiverton I calculated we must be 30-40 minutes down in terms of expected arrival at Kingswear. However by my watch we arrived at our destination bang on time! This meant that the crew had done a fantastic job and let's just say that the run along the estuary and sea wall was exhilarating: Starcross and Dawlish Warren flashed by and *Tornado* must have made a stunning impression hurtling through to Dawlish.

This is how we built *Tornado* - main line running at main line speeds. Yes the challenge associated with the design, building and maintenance of a locomotive based on 1940's prototypes but fully conformant to 21st century regulations is one to savour but *Tornado* wasn't built to be a museum exhibit, it was built to subsidise its keep as a productive part of the heritage movement. Note the word subsidise; *Tornado* is reliant on Covenantors like you and me for its upkeep along with the generosity of sponsors and donors alike. This generosity is also welcomed from our network of volunteers. For nearly 20 years I have been making regular donations

and have often thought about getting more involved but never quite knew how or what was needed. The reason I have taken on the responsibility of editing *TCC* is simple - someone asked, someone who knows me well enough and has known me long enough to come out with it. I may not know you well but we do share a passion for *Tornado* so please excuse my boldness, as in my turn take this chance to ask you!

The reason we publish *TCC* is so that we can keep in touch. Here you will find in words and pictures what our locomotive has been up to and where it's going next. As my experience shows it's far better to travel behind *Tornado* or come out and see it in action, why not bring someone with you? You will read elsewhere in these pages that *Tornado* has visited all three mainland UK countries recently and a number of heritage lines too. These activities rely

on the support of volunteers and as we visit more and more locations there are more and more opportunities to support *Tornado* in a practical way too. Alexa Stott ([volunteer@alsteam.com](mailto:volunteer@alsteam.com)) keeps a directory of volunteers and goes into more detail in her Covenantors' Diary: send her an email and she will either pass your offer onto the correct department or be in touch at the appropriate time. The fact is that the majority of our volunteers live in big cities and towns but with one or two notable exceptions urban-based heritage railways are few and far between. So there is a growing need for a network of volunteers who are able to help out when *Tornado* visits your local preserved railway. If you need more information please ask now or at the Convention in October where I look forward to meeting many of you. **TCC**



Geoff Griffiths



prepared on Hornsey depot in north London. As well as a thorough check of all engineering systems, coaling, watering etc there are cables running everywhere as eight remote cameras are fitted to the locomotive. This work is finished by 2000hrs allowing the support crew to get some rest before their 0500hrs alarm call. By 0650hrs *Tornado* and her 10 coach train are in Kings Cross station platform 1 with a scheduled departure of 0725hrs, nonstop to Grantham. 200 specially invited passengers were on board for the historic journey.

Film crews are swarming all over the place, the crew are fitted with microphones and introduced to Jeremy Clarkson who will be in an unusual move taking the 'public transport' option. After a few pieces to camera it was time to go, but getting everyone onboard was easier said than done, so a little late at 0727hrs *Tornado's* chime whistle sounded and it

was on its way, head first into Gasworks tunnel, driver Don Clarke on the regulator. The other crew were driver Chris Bayliss and traction inspector Jim Smith, ably assisted by trainee fireman Jeremy Clarkson!

As we had done for the first time the week before the climb of Holloway bank caused *Tornado* no problems and we were soon climbing well to Potters Bar, the engine running easily and playing with its ten coach train. But as we pass through Hatfield, the first drama of the day, there is a steam leak from under the boiler which we don't know where it is coming from. It stops when the regulator is shut, which means it could be serious but after some careful elimination its shown that it is from the feed to the Steam Chest Pressure Gauge, and not a serious problem. We head on accelerating to and maintaining 75mph for mile after mile after mile, and a message is passed into the train

of our problem. We need as much time as possible at Grantham to correct the defect. But good news, Robin Davis from National Express is on the train to help us get a clear path, and he reports that the following express is cancelled; we will get a fast line run to Grantham. The only difficulty was that by the top of Stoke Bank trainee fireman Clarkson was literally on his knees, but a creditable if not record breaking performance ensued.

And so it was we arrived some six minutes early at the water stop at Grantham for a well earned break, to water the engine, and to sort the leak. All done, we leave our water stop early for leg two to York, arguably the easiest section with no serious climbing and a good warm engine. *Tornado* ripped across Lincolnshire and Yorkshire, cruising relentlessly at its permitted maximum and had the benefit of a clear run into platform 11 at York for more water. The opportunity was also taken to get a few extra bags of coal onboard to ensure it was easy for the crew on the run to Newcastle. *Tornado* had been running very economically, like a sewing machine, but had travelled faster from London to York than many steam expresses, even with a water stop at Grantham. Previous runs to Edinburgh included a long break at York to service the engine, there would be no such luxury today. The performance so far had been record breaking, but how were we doing in the race?

With a fresh crew of Inspector Steve Chipperfield, and Drivers Brian Grierson and Steve Hanszar *Tornado* left York watched by a crowd of several thousand and followed by the BBC helicopter soon accelerating the train up to 75mph and setting course for a fast line run all the way to Tyne Yard and our next stop, for coal and water. With only ten coaches running at its permitted maximum is no problem but within the confines of Tyne Yard the speed limit is 5mph, and it takes an age to reach our coaling and watering point. Soon enough servicing is underway, but Jeremy Clarkson's abilities on the coal hiab are rather poor so the operator takes over to ensure we depart on time. Everything is in good order and there is time for a snack and a few autographs and then we are off again heading for Newcastle and our last stop at Berwick on Tweed.

The route north of Newcastle is the most challenging section of the ECML but *Tornado* is well on top of the job until the distraction of cooking bacon on the shovel means that boiler pressure drops back, as does performance. The DB Schenker crew soon get on top of the job and *Tornado* is then eating up the miles, gaining back



**'A1' 60163 *Tornado* hauls the LNER Coach Association's Gresley teak set of coaches past Darnholm on the NYMR with a covenantors special, 2 May 2009.**

# Covenantors' Diary *by Alexa Stott*

In the words of TV's most famous grumpy old man Victor Meldrew "I don't believe it". Is it really a year since *Tornado* in her now iconic grey undercoat livery made its first tentative moves at Darlington Locomotive Works, witnessed by many of you and the world's press? Some of you may already know this but I have to confess that Mark Allatt and I did indeed lead the crowd in singing "Happy Birthday" at Taunton Station on the return leg of the 'Torbay Express' on 2 August as the candles burned bright on the birthday cake! If I were to pick out my own highs of this first year, the Royal Naming and the 'Top Gear' race would have to come near the top of the list. But I think my absolute favourite pre-dates both those. It happened nearly a year ago and lasted a whole day – Sunday 21 September 2008 – the day hundreds of you, together with family and friends, after 18 years of waiting, at last had the opportunity to travel behind *Tornado*. Even the weather made a special effort and I will never forget the smiles and the laughter that we all shared that day.

● In my last column I waxed lyrical about *Tornado's* first runs which I and many of you were so privileged to be a part of and looked forward to the Covenantors' Spring Day Out on the North Yorkshire Moors Railway. It was lovely to see so many of you enjoying the unique opportunity to travel behind *Tornado* hauling the teak set on such a scenic railway. It was also a special privilege to have our President, Mrs Dorothy Mather, join us for the day.

● I hope some of you were also able to take advantage of the Covenantor discounts on tickets at the West Somerset Railway and Tyesley Open Weekend events. And by the time you read this I should have had the chance to catch up with some of you at Didcot's August Bank Holiday Gala.

● Looking further ahead I know that many Covenantors will be on the much anticipated Trust-organised Settle & Carlisle tours at the beginning of October. These two trips sold out months ago and they promise to be another very special chapter in *Tornado's* first year of main line operation.

● Preparations are well underway for this year's Convention on 17 October at Barrow Hill Round House near Chesterfield. Further information and a booking form

are enclosed with this edition of TCC. This will be a very special Convention as, for the first time since *Tornado* hauled those first passenger trains last September, you will have exclusive access to the locomotive after the official Convention proceedings have concluded in the morning. We have negotiated a special accommodation rate with the hotel where the Convention is taking place – The Ringwood Hall Hotel – but there are other hotels in the area which are listed on the additional information sheet. If you have any questions please do email me at [volunteer@alsteam.com](mailto:volunteer@alsteam.com).

● I am very pleased to report that Covenantor numbers continue to grow. We now have over 1500 Covenantors, an increase of nearly 330 since the locomotive's first moves in August 2008: that's a 20% growth in one year. The Trust greatly appreciates the support you continue to give us in many ways, both financial and practical. Which leads me on to my by now well publicised request. We are still looking for volunteers to help at events and on tours with *Tornado*. 2010 promises just as busy a year as 2009 and the Trust needs help from people of all ages and abilities. We would like to set up a team that is responsible for keeping *Tornado* clean and polished where ever she may be in the country and we are always looking for help at events where a significant number of people are needed to man what is sometimes a 10-day long stint on our merchandising stall and exhibition stand. As I have said in this column before, the more the merrier, as it makes everyone's job so much easier.

● You may be aware that the Trust's Help Line is no longer answered personally but instead provides a recorded message. Unfortunately the Trust's administrative system simply could not cope with the sheer number of people ringing up asking about steam locomotive movements throughout Britain and overseas so the decision was taken to put a recorded message in place advising people to consult the Trust's website for information on *Tornado* and to send an email if further information was required. We hope to put in place a further phone line giving information specifically about *Tornado* tours in due course.

TCC

the lost time and soon we are running in the sun and heading across the Royal Border Bridge into Berwick. Bells and Two Tones in the person of John Boxall are a long way from their home near Eastleigh but their high speed pumps are critical if we are to have a chance at a right time arrival in Edinburgh, and a potential race win. Good news reaches us that there is a late running CrossCountry service and that if we can get on our way we can go in front, is this the chance to win? After 7 minutes the hoses are off and we are moving forward towards the exit signal, but alas no one has told the signalman and we are stopped for precious minutes as information reaches us that James May in the car might be ahead of us. Finally a green and Steve Chipperfield now driving puts *Tornado* to work storming the climb to Grantshouse as if it wasn't there, but a signal check costs us more time and now its all about "can we make up more time with a fast run into Edinburgh?" whilst the car is in traffic. As we fly towards Edinburgh at 75mph the effort on the footplate is immense, with Jeremy Clarkson still gamely taking his turn with the firing, but there is a stopping train in front and we have to slow and run as quickly as possible behind it. Its frustrating as we would be travelling much faster than the car at this point, but now we must rely on traffic to slow it down. Even with this slower running we are still on time, and after a final clearing of the signals and fast run into Edinburgh Waverley station we arrive one minute ahead of schedule, just eight hours after leaving London. Jeremy Clarkson has said his goodbyes and is now up the stairs of the Waverley running off to the rendezvous point in a nearby hotel. For the crew, the support crew and the many passengers its almost a stunned realism that has set in at the station. Eight hours from London to Edinburgh, easily the fastest preserved run. But if you knock out the stops, its been done in 'Elizabethan' timings with a heavier load. If you then consider the accelerations and decelerations, and the restriction to 75mph you then realise just how well *Tornado* had performed.

Some say it was the finest run in preservation, that it is the kind of run that stands with anything from steam preserved or back in the good old days. What it definitely was is the best performance *Tornado* has offered in its brief operating career. Oh, and of the race, well the car won by six or so minutes. With water troughs it wouldn't have been a race, and with a little traffic we would have won. Maybe we will do it all again someday but for anyone who was there it was a day they'll never forget. TCC



## MEDIA REPORT

by Mark Allatt

In a recent editorial Robin Jones, editor, *Heritage Railway* magazine wrote about, "the ever-increasing success story that is Peppercorn Pacific A1 No 60163 *Tornado*, where trips are packed wherever it goes... *Tornado* has reinforced the point that there is a public demand for main line steam, given the right route and the right product."

*Tornado* continues to maintain her high profile outside of the railway press. Local TV, radio and newspapers are hungry for stories on *Tornado*, even if her appearance in their territory is a simple light engine movement! The *Newbury Weekly News* even described *Tornado* as "the world-famous steam engine" – not bad for a 10 month old locomotive. Although the national press has been quieter than at the time of the naming in York, there was lots of interest in her starring role in 'Top Gear' and *The Times* published a huge photograph of *Tornado* on the NYMR in the run up to our visit to the West Somerset Railway.

Many links to this coverage can be found in the 'in the media' pages on [www.a1steam.com](http://www.a1steam.com) **TCC**

## ENGINEERING UPDATE by David Elliott and Rob Morland

With *Tornado* working an intensive schedule (over 11,000 miles since our first moves at the end of July 2008) any hope that the engineering team might get a rest has been firmly dashed! Overall performance of the locomotive has been good and the freedom from major mechanical problems indicates that we appear to have followed the assembly instructions properly, but more importantly it demonstrates how good the original design was. The A1 has the benefit of being the final development of 25 years of evolution of the original 1922 Gresley Pacific rather than an all new design.

50 square feet of grate and the magnificent Kylchap exhaust system means that with less than perfect coal and an unfamiliar crew we time the train. With good coal and an experienced crew the results are sparkling and very consistent.

That said, we have had a few problems and incidents. On arrival at the North Yorkshire Moors Railway, one of the fusible plugs showed signs of leakage and the engine was taken out of steam to replace it. Unfortunately the replacement also leaked due to a combination of the thread on the plug stopping a bit short and the hole having being tapped out to the maximum for a number 1 sized plug. An urgent phone call to Loughborough resulted in workshop manager Craig Stinchcomb gallantly going in early on the



Mick Rogers

**'A1' 60163 *Tornado* is prepared prior to her appearance at Tyseley's open day, 28 June 2009.**

Sunday morning to machine us two new number 2 sized plugs which I collected by car and got to Grosmont by mid afternoon. By 19.30 we had steam up again and we returned into traffic on the Bank Holiday Monday.

The visit to the NYMR highlighted another problem which we had been protected from by the use of very pure Reverse Osmosis treated water at the GCR and by subsequently doing a lot of running in the north where water quality is good. By the end of our continuous stint

## MERCHANDISE UPDATE by Gill Lord

When I was asked by Mark Allatt to set up a merchandising team in April, little did I know the impact saying "Yes" would have! The team consists of seven extremely talented people, John Martin, Bev Sturdy, Sally and Geoff Smith, Chris Walker, Tony Lord and myself, each one of us bringing a different line of expertise to help with the success of *Tornado* merchandise.

Our first outing at North Yorkshire Moors Railway in May was rather exiting, but we were all filled with trepidation as we set up the stall on the rather cold and blustery platform at Pickering, hoping that the public would greet the new items with enthusiasm. They did, and by the end of our time there we had sold all the mugs, all the greetings cards and most of the pens. We also had our first DVD, *The Power of Tornado* on sale. The caps did not go down too well but we mark those down to experience!

Our next outing was to Tyseley in June, the weather was perfect, and this time we had far more items available. We now



Neil Whicker

**The merchandising volunteers do a roaring trade opposite *Tornado* at Minehead.**

two DVD's, tee shirts and even a trial run of teaspoons which sold out on the first day. But the piece de resistance was the Official 2010 *Tornado* Calendar, thirteen quality photographs of *Tornado*'s first year.

Over the past few weeks, we have had sales teams on the 'Torbay Express' running out of Bristol, these have proved very successful trips for *Tornado*, if slightly tiring for the teams!

When we set up the stall at Didcot in

a few weeks time, we will do so with far more confidence, and many more items for sale, now over 25, far different from the first days at Pickering.

We are always on the look out for more volunteers for the merchandise teams on the trains and stalls, so don't be shy, we are very friendly and have a lot of fun!

## Hot News

The new Bachmann model of *Tornado* is due out in time for Christmas, now is the time to pre-order! Produced in cooperation with the Trust and featuring the modifications we have made to the original design, our licence agreement with Bachmann is such that we will benefit from every model sold, considerably more so with those sold by us directly. So if you are planning to purchase one, please do so from the Trust – these will be extra special as we are planning a couple of extras unique to the models sold by the Trust. Details are included with this edition. **TCC**

on the NYMR, the TDS (Total Dissolved Solids) in the boiler had reached over 3,000 PPM (parts per million) - the target maximum is 2,500 PPM - and the engine was showing a tendency to prime. The NYMR water, whilst softened, still carries quite a high mineral content which quickly increases the TDS in the boiler. There is no magic solution to this other than to blow down water from the boiler on a regular basis, change the water in the boiler from time to time and reduce the washout periods.

The sanders have been a consistent source of trouble. We have used air operated sanders with some components from the two class 86 locomotives that we were allowed by HSBC to strip for brake gear before they were scrapped. We have to have the sanders operational to pass the pre-tour Fitness To Run (FTR) exam which is carried out by DB Schenker. Each sander comprises a trap immediately

under the sand box which is like a Z on its side. Normally the sand will not run uphill along the middle bar of the Z, but if air is blown through a nozzle pointing down the outlet leg of the Z, a slight vacuum is created which picks up the sand and the jet from the nozzle delivers it down the sand pipe to the ejector at the bottom which blows it under the wheel. The biggest problem has been water ingress in the sand boxes and we are steadily working through sealing all the possible sources of leakage. A further problem has been the nozzles in the traps becoming blocked by debris which I suspect has originated from the fitting of the pipework. Regular nozzle cleaning has remedied that. A further problem is that the nozzles sometimes work loose and are then free to fall down the sand pipe onto the track. This is being remedied by applying Loctite Threadlock, however we have run out of spares. Fortunately Glen Edwards

of Electric Traction Services which is exporting refurbished Class 86 and 87 locos to Bulgaria has kindly lent us two nozzles whilst I get some more made.

We also have an issue with the bogie springs. The original AI were fitted with Timmis springs – a proprietary design using thin flat coils. Unfortunately these are no longer made so we have substituted similarly rated coil springs from round wire. With this type of spring the inside diameter of the coil is significantly larger than for the Timmis type which allows the spring to move off centre on the spring cup it sits on. Whilst the locomotive was on a week of maintenance at Didcot, we modified the spring cups to fit guides to keep the spring in the middle.

We are also overhauling the injectors which have become a bit less certain in operation recently – almost certainly due to the high TDS water we have been using causing localised scaling. In practice the live steam injector will be swapped for our new spare, as its location between the inner and outer frames under driver's side of the engine makes in-situ dismantling almost impossible.

We are always on the lookout for more volunteers to help on the engineering side. Experience with large witless bits of metal would be useful but many jobs on the engine require the services of a "fitters mate" so existing qualifications are not essential.

### Support Coach

Work has finally got underway with overhauling the Mk1 BCK we acquired last year. Our Darlington volunteer team is stripping selected areas to enable us to assess just how much work is going to be required to return the body to a good condition, and by the time you read this we should have the coach lifted off its bogies (using the trusty Matterson loco jacks and four stands fabricated by Peter Neesam) to enable full inspection of the bogies by specialist overhaulers. Again we would appreciate more volunteers to work on the coach.

### Electrical System

The electrical system has performed well and most of the minor jobs left over from completion have also now been finished. The NRN radio has also been commissioned. This leaves only the outside frame lighting and manufacture and fitting of silk screened Control Panel fronts remain to be completed.

We have kept a careful eye on all the hundreds of electrical terminals and components for signs of things shaking loose. The second electrical B Exam (six monthly) was completed when the engine

**Tornado will be crossing the famous Victoria Bridge on the Severn Valley Railway in October and November.**





was at Didcot. I'm pleased to say that nothing untoward has been found with just a few terminals giving a 'click' when tightened. A fault with the TPWS healthy LED has been traced and rectified, red LEDs have been fitted to indicate when the tail lights are on and all the panels have been cleaned, with coal dust being vacuumed out where necessary.

The headlamps, tail and marker lamps have continued to work very well and the crews have quickly got the hang of controlling all the lights. John Beesley has kindly agreed to build two additional headlamp housings under his sponsorship arrangement, which Alan Green will then fit with our LED luminaries. This will allow us to carry a spare day and night time headlamp in the support coach.

The only significant problem we have had is water ingress into the conduit box on top of the Auxiliary Services Battery Box (fireman's side). This has polluted the Shore Power connector, which is mounted in this box, with a nasty electrically-conductive combination of water and coal dust. This resulted in all kinds of obscure symptoms with the circuits on that side of the engine. Fortunately our system design allowed these to be isolated until a fortuitous visit to the engine on the West Somerset Railway allowed the fault to be traced and repaired with just a minute to spare before the engine was required for service. The problem has been resolved in the short term by allowing space for water to drain from the conduit and fitting a shroud over the back of the connector. Investigation of how so much water is getting into the box in the first place will be added to the list of jobs for the C Exam next January. **TCC**

## Severn Valley Railway clears the decks for *Tornado's* October debut

The Severn Valley Railway is clearing the decks for the eagerly-anticipated first visit of 'new-build' A1 Pacific No.60163 *Tornado*, which is to spend the last week of October limbering up on half-term passenger turns on the 16-mile Kidderminster - Bridgnorth heritage line.

Already in with a shout for a new, 252,000-plus passenger record this year, the Railway is hoping that "the *Tornado* factor" will rub off with its audience in the Worcestershire, Shropshire and West Midlands catchment area as it has done elsewhere, and give a further shot in the arm to autumn traffic figures.

*Tornado* will get maximum exposure and maximum use during its eight-day working session at the SVR, running two round trips between Kidderminster and Bridgnorth on each of eight consecutive days, clocking up another 500 miles in the process.

Making hay during the A1's all-too-brief stay, the SVR will offer 'one person only' footplate rides at £200 per round trip, and dedicating its superb LNER Gresley varnished teak set to all of *Tornado's* trains, will create reserved seating in three of the vehicles for those seeking to pre-book their '*Tornado* experience'. A modest premium to the normal fare will apply. The possibilities for a Saturday evening gourmet dining train and an enthusiasts' photo charter event are also being explored.

In addition to its daily steaming fees, the A1 will benefit from a profit-sharing agreement between The A1 Locomotive Trust and the SVR, which will help the Trust to make further progress in reducing its building costs debt on the Peppercorn 'Pacific', which, after some 11,000 revenue-earning miles, are now down from £850,000, to around £700,000.

The visit by *Tornado*, due to arrive on the SVR on Thursday 22 October and go into traffic on the following Saturday, steals some of the limelight from another iconic 'Big Four' design engine which will be visiting the railway - GWR King' 4-6-0 No. 6024 *King Edward I* - which is also diagrammed to work half-term holiday trains.

Says SVR General Manager Nick Ralls: "*Tornado's* visit to the SVR is still more than two months away, but already the jungle drums are beating and there's a lot of noise about it in chatrooms.

"The resumption of seven-days-a-week running for the schools half-term holiday week creates the first opportunity for people in this part of the country to come and see and experience *Tornado* at first hand. It's a very glamorous and appealing locomotive, and we're creating lots of opportunities for people to come and see it and ride with it. I'm sure they won't be disappointed." **TCC**

## FINANCE UPDATE: THE TRUST'S LOANS by Barry Wilson

As most Covenantors are aware it was necessary to borrow funds to complete the locomotive once the boiler had been completed. The funding for the boiler itself came from the issue of unsecured bearer bonds which are repayable between 2012 and 2016 at the discretion of the Trustees; the repayment of these bonds is thus not of immediate concern as far as repayment is concerned.

The balance of the borrowing totalled some £441,000 of which £260,000 was provided by Venturesome – an arm of the Charities Aid Foundation. These borrowings were made on a commercial basis and the whole of the £260,000 is repayable by 30 June, 2010.

The remainder of the £441,000 amounting to £181,000 was provided

through the generosity of several covenantors.

The Trustees requested that Covenantors and others who make donations to the Trust continued to do so to secure a debt free future for *Tornado*. I am pleased to say that yet again the Trustees request was well received!

At the last Council meeting in July the Trustees decided to set themselves the target of repaying all of the borrowings, other than the bearer bonds, by January, 2010. The first target will be the Venturesome loans as they currently attract 10% per annum interest and there is no penalty for early repayment on the loan. Thus the loans from Venturesome have already been reduced

from £260,000 to £120,000 and other, interest free loans have also been reduced. As I write a further repayment of £60,000 will be made to Venturesome by September leaving a further £198,000 of loan outstanding to repay by January, 2010.

Of course, the target is exactly that but the Trustees are confident that it is achievable; the last tranche of the interest bearing loan from Venturesome will certainly be repaid before the end of the current calendar year.

When the target is met we will be able to set about the creation of reserves of cash to repay the bond; when that is done we will be three years away from the first ten year overhaul of *Tornado*! **TCC**



**'A1' 60163 Tornado approaches Dawlish Warren with the return 'Torbay Express', 12 July 2009.**





Edward J Dyer



## HERITAGE RAILWAY VISITS *by Alexa Stott*

*Tornado* has clocked up a lot of miles in the last few months, and not all of them on the main line. How do I know this (apart from the announcement that *Tornado* reached the 10,000 mile mark during her stint on the 'Torbay Express')? Because it was a question that caused much discussion and heated debate in the two competitions we ran at the North Yorkshire Moors and West Somerset Railways earlier this year! And the answers – 1,211 miles on the North Yorkshire Moors and 1,398 miles on the West Somerset – which is just one indication of how much work goes into the Trust team effort at these events.

*Tornado's* visits to the North Yorkshire Moors, the West Somerset, Tyseley and Didcot have been great successes, not just for the Trust but for our hosts too. Visitor numbers up, ticket and on-train dining sales up, station shop and restaurant takings up, not to mention a boost for local hotels and businesses.

The start to the visit to the North Yorkshire Moors did not go quite according to plan but after the incident of the fusible plug *Tornado* pulled out all the stops to prove it really is a reliable and hardworking locomotive. Despite some variable weather, people turned out in their hundreds to travel behind the



## FROM THE CHAIR *by Mark Allatt*

In *TCC15* I wrote about how unexpectedly hectic the previous few months had been – well the *Tornado* whirlwind has continued unabated since then. There have been so many amazing days since my last column that it is hard to single out one or two. For me however, the sight of our apple green locomotive hauling the LNER Coach Association's teak rake on the NYMR has to be one of them.

Our successful visit to the NYMR kicked off our next period of operation which has taken us to the three capitals of Great Britain; across the Forth Bridge and through the Severn Tunnel; along the sea wall at Dawlish and over the Devon Banks to Plymouth; along the West Somerset Railway to Minehead, through Kent to Folkestone and back to where construction started at Tyseley. Thank you to our volunteers old and new who are giving huge amounts of their time keeping our locomotive on the main line and bringing so much pleasure to so many people.

As you can read elsewhere in *TCC16* *Tornado's* starring role on

BBC's 'Top Gear' programme, with its 7 million viewers, has helped to bring our locomotive to new audiences. It has ensured that the numbers waving from the line side and travelling behind *Tornado* have continued to grow. According to Robin Jones, editor of *Heritage Railway* magazine, "Steam, of the BR apple green variety, is taking this summer by storm, as the public clamour to see new-build £3 million A1 pacific No 60163 *Tornado* shows no sign of abating. Ever-bigger crowds follow the locomotive everywhere it goes."

It is thanks to your continued generosity that we have come this far. However, we still need to service the loans taken out (see page 7) and bond issue taken up to ensure the locomotive's long term operations. Then there is the matter of at least £50,000 needed to put our own fully equipped and certified support coach behind the locomotive.

We are therefore more keen than ever to encourage as many supporters as possible to join us by either becoming a Covenanter, making a donation, taking

out a dedicated donation to sponsor a part of the locomotive (there are still many components left to support even though almost all of them are already on the locomotive!) and/or subscribing to our bond issue. We have seen continued growth in numbers of covenantors coming on board in the last few months, no doubt partly due to our locomotive's appearance on 'Top Gear'. So, if you know anyone who wants to become part of *Tornado* please encourage them to come on-board. Details on all of these can be found in the 'how you can help' section of our new website [www.a1steam.com](http://www.a1steam.com).

Finally, on page 11 you will find *Tornado's* operational schedule, with visits to Barrow Hill roundhouse and the Severn Valley Railway now booked in addition to our main line tours.

Please put these dates in your diary and help us to fill these trains. We will inform you of details of future events and milestones as soon as we can but please keep an eye on the events section of our website for the latest information. I look forward to seeing you in on-board. **TCC**



**'A1' 60163 *Tornado* approaches Churchlands Bridge, West Somerset Railway, 4 June 2009.**



locomotive and stand at the line side to photograph it passing by. A highlight was undoubtedly seeing *Tornado* hauling the teak set, recreating a scene that hasn't been seen for over forty years. Footplate rides proved an irresistible draw and rapidly sold out, and the first outing for some of the new official *Tornado* merchandise was also a huge success.

Then it was on to the West Somerset Railway and *Tornado's* first visit to the seaside since her test run to Scarborough last November. Once again we received a

warm welcome from our hosts. *Tornado* was the undoubted star of the Mixed Traffic Gala and it was an amazing sight to stand on the platform at Minehead and watch as the crowds grew... and grew... and grew... in the minutes leading up to *Tornado's* booked arrival time twice a day. At the beginning of the visit *Tornado* hauled a train of 8 carriages but this was quickly revised upwards, first to 9 and then to 10 and at one point even reached 11 carriages, so high was the demand to travel behind this very special locomotive. We were also honoured to be asked to haul the West Somerset's charity train in aid of Help for Heroes during our visit and there was another first – *Tornado* being blessed by the Railway Chaplain one very rainy Sunday.

And so to the end of June and this time not another first for *Tornado* - because this particular event was quite correctly billed as a return. To Tyseley where *Tornado's* frames were laid back in 1994 and where they stayed until 1997 when the Trust moved to Darlington. And it was to be a meeting of "first and last" with a replica of *Locomotion No. 1* also in operation over the weekend. However, as far as the regional BBC news programme was concerned, it was an opportunity for the people of Birmingham and the Midlands to come and see the "Top Gear locomotive". Whatever their reasons for coming, yet again people did come to see *Tornado* in their hundreds and a good time was undoubtedly had by all.

Of course, none of this could have been done without the invaluable support of the Trust's support crew, engineering team and sales and events team. To them all, on behalf of the Trust, I send a huge thank you. They are too many to list individually but they know who they are. Thank you.

And now we're at Didcot although by the time you read this, that visit will also have come to a, hopefully, successful conclusion for all concerned. There is no

**New meets old – 'A1' 60163 *Tornado* stands alongside replica *Locomotion No. 1* at Tyseley, 25 June 2009.**



Clive Hanley

doubt that the opportunity to see *Tornado* up close and personal, either static or at relatively slow speeds, is a big draw for families and enthusiasts alike. And long may this continue to be the case as *Tornado* moves on to the Severn Valley at the end of October via a second visit to the Barrow Hill Round House near Chesterfield for the Annual Convention on 17th October. And then there's 2010's preserved railway visits to start planning. You could never say life with *Tornado* is dull! **TCC**

## Calendar of events 2009

● **13 September** 'The Cathedrals Express' **London - Exeter and return** ([www.steamdreams.com](http://www.steamdreams.com))

● **19 September** 'The Cathedrals Express' **London - York and return** ([www.steamdreams.com](http://www.steamdreams.com))  
**Sold out**

● **26 September** 'The Cathedrals Express' **London - York and return** ([www.steamdreams.com](http://www.steamdreams.com))

● **3 October** 'The Waverley' **York - Carlisle and return** (AISLT) **Sold out**

● **4 October** 'The Waverley' **York - Carlisle and return** (AISLT) **Sold out**

● **10 October** 'The Cumbrian Mountain Tornado' **Hellifield - Carlisle and return** ([www.pathfindertours.co.uk](http://www.pathfindertours.co.uk))

**Monday 12 - Thursday 22 October Barrow Hill, Chesterfield** [www.barrowhill.org](http://www.barrowhill.org)

● **17 OCTOBER**  
COVENANTORS CONVENTION  
AT BARROW HILL (AISLT)

● **24 October - 7 November**  
**Severn Valley Railway**  
[www.svr.co.uk](http://www.svr.co.uk)

● **7 November** 'The Thames Tornado' **Ealing Broadway - Gloucester - London Victoria** (*Tornado* on return only, [www.pathfindertours.co.uk](http://www.pathfindertours.co.uk))

● **26 November** 'The Cathedrals Express' **London - York and return** ([www.steamdreams.com](http://www.steamdreams.com))

● **27 November** 'The Cathedrals Express' **London - York and return** ([www.steamdreams.com](http://www.steamdreams.com))

● **21 December Kent Circular** ([www.steamdreams.com](http://www.steamdreams.com))

At the time of going to press negotiations for 2010 are underway and details will be made available as soon as they are confirmed.



# TORNADO ON TOUR



Ian McDonald

**16 May 2009** ▲▲

**King's Cross - York**

*'The Coronation' charter for Steam Dreams*

We kick off this pictorial review with another first – the first time that 60163 was asked to deputise for a booked loco that was unavailable – in this case her East Coast pacific cousin 60019 Bittern. At short notice, *Tornado* scurried down from the North Yorks Moors to be in position for the first leg of this high profile tour. And she made the most of her unexpected opportunity by lifting her 500 ton 13 coach train up Stoke bank in fine style, cresting the summit at 71mph – a performance that required 55% cut-off to produce an estimated 2250hp at the drawbar for the final assault. Arrival in York was five minutes early.

**18**

**May** ►►

**2009**

**York - King's Cross**

*'The Coronation' charter for Steam Dreams*

This was *Tornado's* booked leg of 'The Coronation', safely bringing home a hugely successful tour back to the capital to conclude a three-day ECML pacific celebration.



Geoff Griffiths

**23 May 2009** ►►►

**King's Cross - York**

*'The Cathedrals Express' charter for Steam Dreams*

This was meant to be "Gresley's Big Day" (50th anniversary of her post-war speed record of 112½ mph) but *Tornado* was having none of it – with astonishing consistency, she repeated her remarkable feat of a week previous by again topping Stoke summit at 71½ mph – this time she was eight minutes early on arrival at York!



Ian McDonald





'AI' 60163 Tornado waits at Bristol Temple Meads with the 'Severn Coast Express' to Minehead.

**30 May 2009** ▲▶▶

**Gloucester - Cardiff Central**  
**Cardiff Central - Bristol**  
**Bristol - Minehead**

*'Severn Coast Express' charters for Pathfinder Tours*

After an intense period of activity on home territory, this tour saw a complete change of scene as Tornado made her way over to the less familiar west side of the country and her first foray into the Principality. A long day, with three separate legs of the 'Severn Coast Express', nevertheless her time-keeping was once again excellent, culminating in a five minute early arrival at Minehead, terminus of the West Somerset Railway. This was another first: first arrival onto a preserved line with a mainline charter train!



'AI' 60163 Tornado makes her inaugural journey into Wales with the 'Severn Coast Express'.

Mick Roger

**18 June 2009** ▶▶▶

**Minehead - London Victoria**

*'The Cathedrals Express' charter for Steam Dreams*

After another hugely successful preserved line visit, Tornado's 19 day stay in Somerset concluded with working the return leg of a Steam Dreams charter back to London. Compared to her usual high standards, this run was marred by a brake fault that caused a 20 minute delay at Castle Cary. A disaster was averted however as, having isolated the fault on the first pump, the back-up one was brought into play. Perhaps not a first to celebrate as such(!) but it proved the worth of "going the extra mile" in fitting the additional pump. ["Well done Engineering" – Ed]



Paul Blowfield



Battersea Power Station creates an imposing backdrop as 'A1' 60163 Tornado passes Wandsworth Rd with the daytime Father's Day "special".



**21 June 2009**

**Waterloo - Basingstoke/Botley Botley/Guildford - Waterloo; Victoria - Ramsgate/Folkestone West; Folkestone West/Tonbridge - Victoria** 'The Cathedrals Express' charters for Steam Dreams



Craig Stetton

Tornado worked this Steam Dreams "regular" for Father's Day, taking her to further new places on the former Southern Railway network including the iconic Shakespeare cliff section on the Kent coast. After a long day, featuring 396 miles of running, arrival back at London Victoria was a mere four mins late.

**5 July 2009 - 9 August 2009**

**Bristol - Kingswear -and return** 'Torbay Express' charters (six trips in total) And so to glorious Devon for a six-week stint hauling the 'Torbay Express'. A regular and not too onerous working based from Bristol (approx 230 miles total), the highlight is undoubtedly the run along the sea wall at Dawlish.

On the second of these trips (12 July) Tornado clocked up its 10,000th mile in service.

Performance was remarkably consistent on all these trips. Arrival at Kingswear was never more than six minutes late and arrival back at Bristol was always on time or early!



Mark Wilkins

'A1' 60163 Tornado blasts out of Parsons Tunnel with the 'Torbay Express', 5 July 2009.



Mick Rogers

'A1' 60163 Tornado approaches Dawlish station with the 9 August 'Torbay Express'.



'A1' 60163 Tornado attracts a lot of attention on the Dawlish sea wall. 'Torbay Express', 2 August 2009.

Robin Coombes



An idyllic summer evening shot of 'A1' 60163 Tornado passing a cricket match between Llanelli and Burry Port with the Carmarthen-Bristol leg of 'The Towy Tornado', 25 July 2009.



**25 July 2009**

**Bristol - Carmarthen - Bristol** 'The Towy Tornado' charter for Pathfinder Tours  
This one-off tour took the A1 deep into South Wales, through Swansea, by the sea at Llanelli and following the Towy estuary to Carmarthen – her furthest westerly point to date!

Robin Coombes

**8 August 2009 ►►►**

**Bristol - Plymouth and return** 'The Tamar Tornado' charter for Pathfinder Tours  
This was billed as the loco's first serious performance challenge, being pitched against the much-vaunted South Devon banks. The names Dainton, Rattery and Hemerdon are supposed to strike fear into the heart of enginemen of the Great Western road to the South West. And the verdict of our Operations Director the day after the run? "Apparently there are banks in Devon but we never found any!" Hmm! Perhaps we need to head north to find some proper mountains. Settle-Carlisle 3 October anyone...?



Mick Rogers

**15 August 2009 ►►►**



Ian McDonald

**Above: 'A1' 60163 Tornado approaches Clapham Junction with 'The Cathedrals Express' 15 August 2009.**

**Right: 'A1' 60163 Tornado stands at London's Victoria station after arrival with the evening run of 'The Cathedrals Express' 15 August 2009.**



Michelle Lacey

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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Designed by Debbie Nolan

\* All information correct at the time of going to press on 1 September 2009. 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 second Saturday each month (11am – 4pm).

Access to the works is via Head of Steam (the newly refurbished 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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