

THE COMMUNICATION CORD



60163 TORNADO

New Steam for the Main Line

No. 25 Winter 2012



At 60163
Tornado climbs
the gradient
into Medstead
& Four Marks,
Mid-Hants
Railway. 22nd
October 2011.

Edward J Dyer

KEEPING TORNADO ON THE TRACKS

by David Elliott

Scheduled maintenance & repairs

Following the Annual Convention at Barrow Hill on 1st October, a 'B' exam was carried out along with resolving some deferred defects. For some time the turbo generator had been producing a limited output, so as we have a spare it was swapped. Unfortunately on testing the replacement, the steam pipe connection was leaking so the generator had to

come off again, this time with the smoke deflector removed which overcame the difficult access to the pipe joints. Whilst the generator was off and as the engine was in steam, the opportunity was taken to blow the steam pipe through. The initial small discharge of steam followed by a muffled "phut" noise and a much bigger jet of steam suggests that we had a partial blockage which had been blown out. The turbo generator now works properly.

The locomotive was prepared for an FTR (Fitness To Run) exam on Sunday 9th October in anticipation of running light engine to Stewarts Lane for an VSOE 'British Pullman' train on Wednesday 12th October, however during the FTR steam was noted leaking from next to the elbow where the steam pipe to the exhaust injector enters the injector body. A small crack was discovered in the copper pipe. Herculean efforts by Mick Robinson and

DUNCAN THORNHILL

With great sadness, I must advise you that Duncan Thornton passed away very suddenly in the early hours of 27th December 2011. I know some of you knew him personally - he was Covenantor number 4, a regular attendee at many Trust events and one of the group that travelled on the Royal Train after *Tornado's* naming at York by TRH The Prince of Wales and The Duchess of Cornwall, something which he told me on several occasions was a great honour for him. The Trust is very grateful for his generous support over so many years as without him and others like him *Tornado* would still be a pipedream. He will be greatly missed by us all.

Alexa Stott

2012 Covenantor Cards

are being sent out - if any Covenantor has not received one please contact gordon.best@alsteam.com.

Right: A1 60163 *Tornado* undergoes her winter maintenance programme at the Mid Hants Railway in January 2012.



David Elliott

From the chair by Mark Allatt



I'd like to start by wishing all of our Covenantors, volunteers and other supporters a belated happy and prosperous New Year. Let's hope that this one starts the way the last one ended, with our locomotive performing well and our finances back on track.

You will have noticed that I am back in the driving seat (again!) for TCC. Peter Shakespeare has had to stand down for personal reasons and so I would like to wish him well and thank him for his contribution. You will also read elsewhere in TCC that Peter Neesam, who helped to build *Tornado* as a contactor in Darlington and acted as a contracted roving fitter since we started operations, has decided to move on to pastures new. We wish him well in his new ventures. However, we are delighted that John Wilkinson, who many of you will know as one of our support crew Responsible Officers, had agreed to come on board in our newly created role as Locomotive Manager.

As you will read in this edition of TCC, our support crew and merchandise team worked exceptionally hard in the run up to Christmas, with eight main line trains in November/December (one more than planned) and our visit to the Mid

Hants Railway, delivering a well turned out locomotive for our passengers and some record breaking sales. This was supplemented by over 300 on-line and postal sales during the same period.

As usual we are still looking for volunteers across all disciplines. It takes a lot of people to keep *Tornado* on the rails, not just those who travel with the locomotive as support crew or merchandise team 'trolley dollies' but also those in the engineering team in Darlington and elsewhere. At the moment we are seeking people to help with on-train sales, events, merchandise logistics, marketing, giving presentations, archives, works guides, engine cleaning, engineering (especially on the support coach), support crew and works housekeeping. There is always so much more that we could achieve with the right volunteer with the right skills and a can-do attitude. We are especially short of team leaders who will take some form of managerial responsibility within their discipline. Please email volunteer@alsteam.com if you think you can help.

And finally, thank you all for your support throughout 2011. Your kind letters and emails always help to keep the team motivated. I hope to see as many of you as possible out on our trains supporting *Tornado* over the next few months. **TCC**

Chris Walker were made to remove the offending pipe whilst our master plumber Tom Snowball was summoned from Darlington late in the evening with the necessary equipment and a spare piece of pipe to affect a repair. This also involved M Machine (our material supplier in Darlington) opening up on Sunday evening to provide us with enough silver solder to do the repair.

In the event it took a lot longer to remove the pipe than expected as the air brake equipment and pipework (not on the original AIs) got in the way. Eventually a new section of pipe was made up on the Monday morning and the rest of the day spent refitting it and various air pipes and fittings. DB Schenker had been able to re-schedule the light engine move a day later and their FTR examiner duly arrived early Monday evening. Unfortunately the gods were not with us, and the gasket between the flange onto the injector and the injector itself leaked and no amount of tightening of bolts stopped the problem. With no more time to achieve the FTR, we had to inform the promoter that we were not going to be able to get to London in time for the train. However, as there was still 36 hours before the VSOE train was due to run, after several phone calls, Graeme Bunker was able to arrange for 70000 *Britannia* to substitute.

At this stage we removed the exhaust injector which in hind sight is what we should have done in the first place. This revealed a small piece of the original gasket under the new one preventing it from seating properly. The location of the flange on the injector is such that it is not possible to see it with the injector in place, so the cleaning of the flange had to be done by feel.

The injector was subsequently refitted and the locomotive tested again prior to an FTR exam at the end of the week to enable it to take up its next duty. Since then we have made some minor changes to the inspection procedures to improve the likelihood of such faults being detected and repaired earlier.

Subsequently *Tornado* has undergone a further 'A' exam which has seen us through to the end of the operating season.

One out of course repair of note has been the need to renew the LH small end bearing bush (the bearing between the connecting rod and the crosshead). Jon Pridmore had noted during daily oiling that the oil consumption of this bearing had risen substantially. The oil for the small end bearing is fed from an oil box built into the crosshead, through ports drilled in the gudgeon pin. The oil flow is controlled by a combination of the close fit between

THANK YOU PETE – AND GOOD LUCK!

After two years helping to build *Tornado* and over three years of operation, Peter Neesam decided to move on towards the end of 2011. Peter played a large part in the reliable and successful operation of the locomotive since the start in August 2008 and we wish him all the best in his future career.

This gap in our engineering resource has been temporarily filled by a combination of increased input from Jon Pridmore on day-to-day running, use of our other contractors for scheduled maintenance and repairs including Mick Robinson (who also played a significant part in building the engine) and our Director of Engineering exercising his spanners rather more of late. As is covered elsewhere a review of how we operate and maintain *Tornado* has been undertaken and once the new arrangements have bedded down additional engineering resources will be taken on as necessary.

Overall *Tornado* has helped by requiring less than the normal level of out-of-course repairs. Apart from one incident described below, the locomotive has performed as well as it ever has done to take us up to the 2011/12 winter maintenance period.



David Elliott

the gudgeon pin and the bearing bush and a Worsted wool restrictor/trimming in the oil box siphon tube. The tails on the trimming lift the oil into the siphon tube by capillary action whilst a plug of woollen strands in the siphon tube regulates the flow.

The connecting rod and crosshead were split at Southall with the gudgeon pin showing signs of water ingress which had caused rapid wear.

The gudgeon pin was taken back to County Durham where one of our contractors used during construction of the locomotive, Durham Precision Engineering, cylindrically ground the pin to restore it to a round and smooth condition. Once the new diameter could be measured, a quick e-mail to Craig Stinchcombe at the Great Central Railway led to a small end bush and two oil retaining rings from the spare set of rod bushes we keep at Loughborough being machined to the required dimensions.

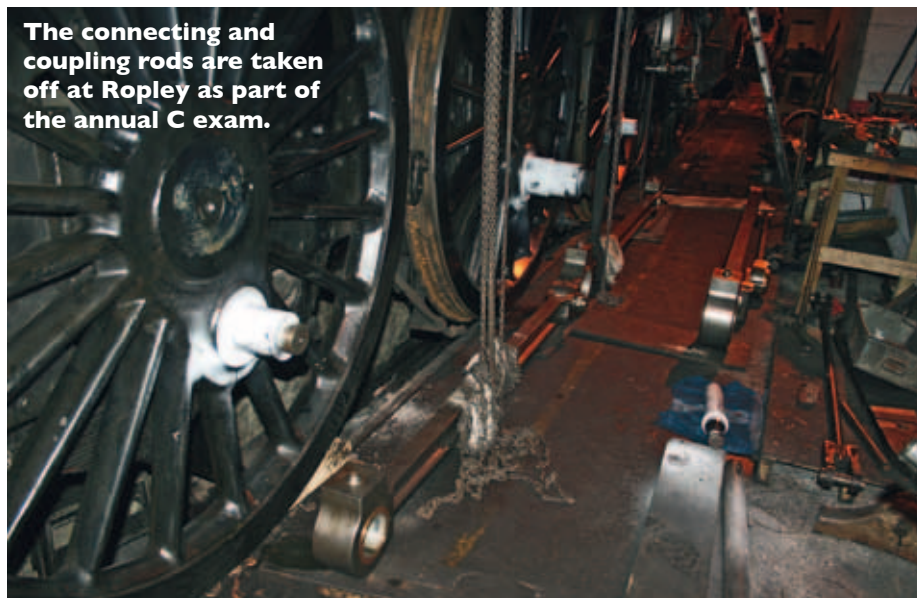
Along with the gudgeon pin, the new bush and rings made their way to Southall where they were refitted to the locomotive. The oil consumption is back to normal and the bearing is running cool.

Planned Winter Maintenance

Following the short notice substitution of *Tornado* for *King Edward I* due to a gauging problem with the latter on 'The William Shakespeare' tour from London Paddington to Stratford on Avon on 30th December 2011, our locomotive made its way to Ropley on the Mid Hants Railway on New Year's Eve.

The question of where and how to carry out the annual inspection and winter maintenance work has been exercising us for several weeks. With the last train of 2011 and the first train of 2012 originating from London, the cost of light engine running to and from York or another base in the North is prohibitive. There was the

The connecting and coupling rods are taken off at Ropley as part of the annual C exam.



David Elliott

possibility of using the newly renovated facilities of Locomotive Services at Southall, however there was some doubt as to whether the building work would be sufficiently advanced to enable us to take up residence in January.

Thus when Colin Chambers, Chairman of the Mid Hants Railway offered the use of the facilities and staff at Ropley, we willingly accepted. Our staff are carrying out inspection work and a few tasks including removing both injectors for cleaning and repair as these items are special to *Tornado*, whilst the MHR staff lead by Frank Boait are doing the routine dismantling and reassembly including piston and valve exam, removing the motion to enable all the rod bushes and crank pins to be inspected and measured. They have also removed all the engine and tender brake gear to enable inspection of pins and bushes and to ensure full lubrication of all the joints.

At the time of writing, the insurance boiler inspector has completed the cold examination of the boiler and has not found any problems.

A further periodic item is ultrasonic and magnetic particle inspection of the axles and crank pins which is scheduled every four years. As the start point for *Tornado* was August 2008, it is being done now to avoid having to take the locomotive out of traffic part way through the year.

Other work includes paint work repairs, the tender sides needing rather more than would be normally expected as there is evidence of something metallic having scraped along the upper side in addition to the usual chips due to flying coal and scratches from line side vegetation. The opportunity is being taken to replace the early style British Railways emblem with the later style crest on the tender sides.

Modifications

Three significant modifications were planned for this winter:

Improved engine-tender drawbar spring arrangement:

Tornado has sometimes produced the well known yawing phenomenon that the original A1 fleet exhibited from time to time. The best way this can be minimised is to ensure that the engine/tender drawbar rubber springs are maintained at the designed 14 tons static load. However due to the geometrical layout of the drawbar, when the locomotive goes round tight bends, this figure is considerably exceeded causing the rubber springs to permanently deform requiring frequent adjustment. In order to reduce the maximum compression in the present two springs, a new longer clevis is being made by Ian Howitt to enable three springs to be fitted, thus reducing the maximum compression in each spring by one third.

Larger capacity auxiliary

batteries: The auxiliary electrical system powers the cab and underframe lights and if these are left on for too long when there is no generation or charger on-line, they become flattened which rapidly shortens the life of the existing batteries. To overcome this higher capacity traction type batteries are being fitted.

GSMR Radio: As part of the roll out of the GSMR digital radio system on the national network, *Tornado* was due to be fitted with GSMR radio during this winter maintenance period. However, Network Rail which is carrying out the work has changed contractors recently as a result of which the fitment is being postponed until later this year. We have already installed conduits and cables for the antenna and power supply last year so the remaining scope relatively small. **TCC**

SUPPORT COACH UPDATE

by David Elliott

During December work on our own support coach has ramped up considerably with Mick Robinson attending regularly and Paul Depledge making progress with the electrics.

The effort has been further enhanced now that Tony Lord has kindly volunteered to act as Works Manager for Darlington Locomotive Works following his and Gill Lord's move to the Darlington area [*that's dedication for you!* – editor].

Mick has concentrated on corridor connections overhaul, and refitting doors of which the luggage van ones have proved to be difficult as we are using only one out of the four original doors, the remainder being beyond economic repair. The coach was supplied with four spare doors from a former Southern region Mark I EMU, however as these were made at York as opposed to our coach which started life at Swindon. They have required a fair amount of fitting and adjustment. Progress is now being made with the passenger and guard's doors.

Mick has also completed making and fitting the pieces of galvanised steel sheet to cover all the exposed woodwork underneath – a new requirement for overhauled Mark I coaches, and has refitted the vacuum brake cylinders. He has also made useful progress on the Panda diesel generator frame including making the radiator air ducting and installing in the same frame the warm air convector which heats the workshop area.

The mechanical design of the new handbrake mechanism is largely complete and a design submission to the VAB, RAL for approval against railway group standards has been made. Preliminary approval of this will enable the modifications to the mechanical components on the coach frame to be completed which will in turn enable the new battery boxes to be fitted (as the hand brake gear is behind the battery boxes and hard to access with them in place).

Paul Depledge has fitted the locomotive battery charger connections at the ends of the coach and pulled wires through the conduits to the connectors. He has also diverted a stretch of the main electrical trunking on the underframe to clear the new beam required to mount the hydraulic

LOCOMOTIVE MANAGER APPOINTED

We are pleased to announce the appointment of John Wilkinson as Locomotive Manager. John will be responsible for day to day planning and delivery, and also the ongoing development of our support crew volunteers as they improve their skills and competence. We are delighted John has joined the team as he brings a wealth of experience and knowledge to a new role which will be pivotal to the Trust in the future.

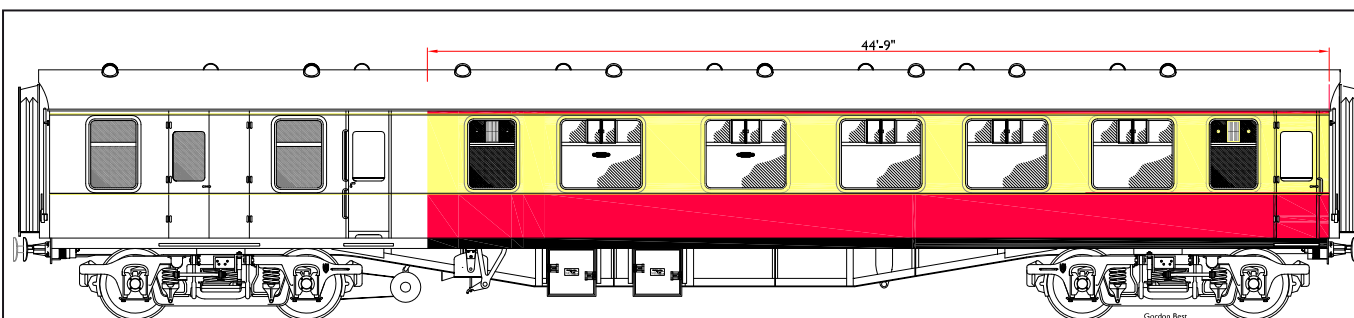
John joins us from the North Yorkshire Moors Railway where he was Footplate Superintendent and has been involved in the running of steam locomotives on the main line and heritage railways for over 30 years.

John is passionate about former LNER traction and remains involved with the NYMR and The Sir Nigel Gresley Locomotive Preservation Trust in a voluntary capacity.

Commenting on his appointment, John said, "I have enjoyed working as a volunteer with *Tornado* and look forward to further involvement going forward, particularly working with our volunteer support crew."

Graeme Bunker





Your support for 'Use Your Loaf' has now reached 44ft9in or £53,650 – please help us to finish the job!

hand brake actuators.

Our two electrical volunteers Gordon Little and Gordon Wells have almost completed the reassembly of the 200A alternator and it is hoped to test it shortly by mounting it in the lathe to turn the rotor. Gordon Little has partially re-manufactured the brush gear which was seized and was short of brush springs.

Peter Fletcher of the nearby Fletcher Joinery which has the capacity to machine the numerous moulding profiles needed for the coach woodwork has already made the curved battens to line the window frames and the hardwood pattresses which are used to mount the RCH coach lighting control jumper cables on the ends of the vehicle.

Peter Fletcher has also put us in touch with a semi-retired carpenter with considerable experience of restoring historical buildings who is able to fit the coach interior which is mostly veneered plywood with hardwood mouldings. As the external door installation is

completed, moulded hardwood door linings can be fitted which provide edges for the interior panelling.

Peter Horwood from M Machine has taken measurements to cut and bend thin Zintec coated steel sheet to form the new ceilings. The steel is being used to provide modern levels of flame retarding surfaces. It is being backed with the traditional hardboard to prevent the steel sheet from drumming. Once it has been trial fitted it will be taken down and moved to M Machine's spray booth for painting white prior to final fitting to the coach.

We have benefited from volunteers Robin Langstaff and Muriel Butterfield who brought their caravan up to Darlington for ten days and have made considerable progress with painting components and the exposed parts of the underframe.

The present plan for the completion of the coach assumes a substantial number of volunteer days to help with tasks such as painting and cleaning and fettling



David Elliott

components, so if you think you could help us we would be interested to hear from you. Please contact chris.walker@alsteam.com for more information on volunteering to complete the support coach. **TCC**

Left: Paul welds a bracket that will carry the electrical trunking on the coach underside.

Above right: Two doors are fitted to the van end of the support coach.

Purchasing Volunteer Required

With work now continuing apace on the support coach, there is a considerable requirement to obtain materials and, to a lesser extent, arrange for work to be carried out by external contractors. There is also an on-going requirement to purchase spares and consumables for the operation of the locomotive. The Trust has an opportunity to minimise costs by utilising expertise in purchasing. A volunteer with expertise in procurement, particularly in the field of engineering, would therefore be welcomed. If anybody with this experience is prepared to volunteer their services would they please e-mail chris.walker@alsteam.com with the subject "Purchasing Volunteer" or write to Chris Walker via the Darlington Locomotive Works address, marking the envelope "Purchasing Volunteer", in both cases stating any relevant experience and qualifications.



David Elliott

EASYFUNDRAISING

How to help *Tornado* without spending a penny more by Chris Walker

There are two ways in which internet users can contribute to *Tornado* without spending a penny more than they would otherwise do. They are by using www.easysearch.org.uk and www.easyfundraising.org.uk. The **AI Steam Locomotive Trust** is registered with both of these organisations so that it can benefit from funds donated by advertisers and suppliers who support the sites.

www.easysearch.org.uk

Easysearch is a search engine, similar to Google, Bing, ASK, Yahoo, etc. It uses the combined results from the Bing and Yahoo search engines to present the results. To contribute funds raised through use of the search facility to the **AI Trust**, go to www.easysearch.org.uk. The first time that you use the site, the home page will give you the opportunity to select the cause that you wish to support:

Step 1



Type "*AI Steam*" into the cause name box then click on "Find". Select "*AI Steam Locomotive Trust*" from the possible list of causes (it should be the first entry) and the window will change to confirm that searches that you make now will raise funds for the Trust:

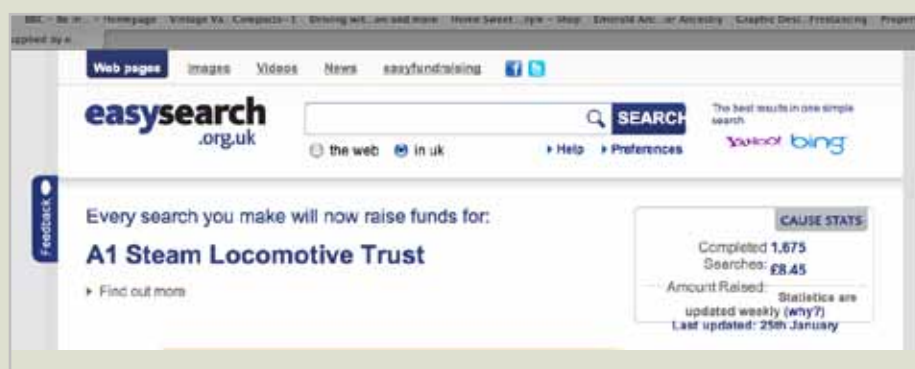
How does it work?

The search engines *easysearch* work with generate revenues from advertising goods and services. They receive a percentage of this revenue and pass on a large portion to the cause for which you are searching and supporting. The final amount per search can vary, however generally works out around 0.5p. How much is raised depends on how much supporters use the web, but by making just ten searches per day with *easysearch* instead of another search engine they should generate over £20 per year for you're the Trust. With around 2,000 covenantors, we can do better than that!

Note that there is a section on the right that will tell you how much has been raised by using *easysearch* for the Trust.



Step 2



You only need to do this once. Don't forget to add the site to your Favourites list. You can also make it your default search engine and/or home page. If you are a Facebook or Twitter user, there are also links to these.

Easyfundraising is another way to raise funds for the Trust. The site works as a front end to many retailer sites. By logging into **easyfundraising.org.uk** first and then accessing the retail site that you wish to use, a percentage of anything you buy via this link goes to the Trust. There are currently about 2,000 sites participating in the scheme. These include most, if not all, of the big retailers such as Amazon, John Lewis, House of Fraser, M&S, Tesco, Sainsburys, etc. Also included are the big insurance companies, such as Aviva, AA,

Churchill, MoreThan, etc. Travel websites, such as airlines, National Express, rail operators, hotels and general booking sites such as hotels.com, lastminute.com, thetrainline.com, ticketmaster and so on are all there. Why not have a look at the impressive list at **www.easyfundraising.org.uk/a-z-of-retailers**?

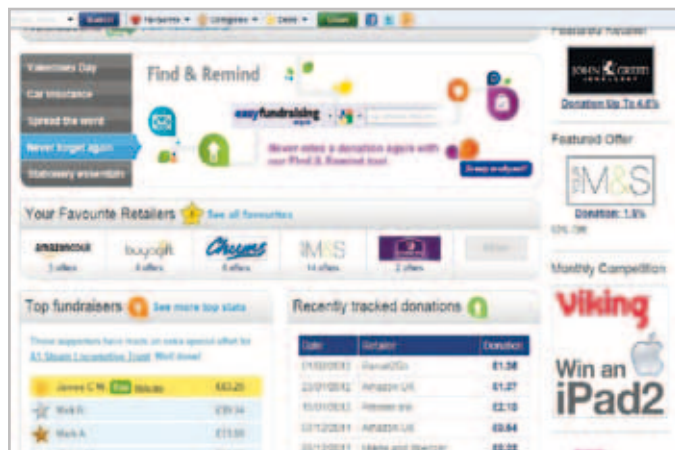
To use *easyfundraising* it is necessary to register once and select the organisation that you wish to support (hopefully the Trust!). To do this go to **www.**

easyfundraising.org.uk. Click on the “Not Registered” icon at the top left of the window. This will open the registration window, which requires you to give your name and e-mail address and create a password. At the same time, you select the cause that you wish to support. To select the Trust, type “AI Steam” into the Charity/Organisation box and click the Search button. Select the “AI Steam Locomotive Trust” option, which should be at the top of the list that is displayed. Click on the Register button and all is done.

How does it work?

Next time you log in, the site will recognise the organisation that you are supporting. Any purchases made on links that you follow will automatically generate funds for the Trust. The amounts vary but an average is 2.5% of the purchase price.

On the home page you will see information about how much has been raised by all supporters and how much you personally have raised:



3 Scroll down, enter the name of the retailer in the Search box at the top right of the window or use the bar above the names to select the initial letter of the retailer that you want, for example “P” for Premier Inn, Phones 4U, Pet Supermarket, etc. Click on the site that you want, for example Premier Inn, and a personalised easyfundraising summary page for the retailer will be displayed showing the percentage of a sale going to the Trust, special offers available, your recent visits to the site, etc.:



2 Regular sites used are shown, so you do not have to search for them. To find a site that is not on your list, select “A-Z Retailers” from the list of Popular Pages on the left of the window. This opens up a full list of all participating sites in alphabetical order:



4 If you wish to continue, click on one of the Go Shopping buttons you will be taken either to the familiar normal home page for that retailer or to a page specific to the offer that you have chosen. If you have registered on the retailer's site, you will have to log in as usual; login details are not transferred from *easyfundraising*. After each purchase, you will receive an e-mail confirming that you purchased via the *easyfundraising* site and confirming the amount that you have contributed. Many of them are small amounts but they all add up:

5 You will see from the earlier screenshot of my home page above that so far only 16

supporters are using *easyfundraising* to access internet shopping sites. That has raised just under £107 since the Trust registered with the system. It didn't cost these supporters a penny extra. Just think how much can be raised if we all get into the habit of shopping this way! The difficult bit is remembering to log into the *easyfundraising* site before going off shopping. Once you have that cracked, the rest is easy.



TORNADO ON TOUR *by Graham Nicholas*

**‘British Pullman’
luncheon excursion,
30th September**

**2011 London Victoria
to Guildford/Shalford
1Z82 charter for VSOE**

261 miles run

We begin this review with another working for *Tornado* on the prestigious VSOE Pullman stock, running impeccably to time in the leafy surroundings of the Surrey Hills. This was her first outing with the Pullmans in her Brunswick Green livery, the combination looking particularly attractive in the early autumn sunshine. Directly after the trip, *Tornado* ran light up to Barrow Hill for her next assignment.



Ian McDonald



Ken Horan

AI SLT Annual Convention, Barrow Hill roundhouse, 1st October 2011

Always a covenantors' red letter day, *Tornado* was once again on display and giving rides at the timewarp (if you ignore the diesels!) that is Barrow Hill roundhouse. The sunshine continued from the previous day to allow the obligatory group photo to be taken outdoors on this occasion.

**Mid Hants Railway,
20th October to
3rd November 2011**
518 miles run

Tornado returned back south to spend her autumn half-term holidays at the Mid-Hants Railway. A notable event was the method of arrival as the A1 was used to convey fellow pacifics 70000 *Britannia* and A4 *Bittern* (running as 4492 *Dominion of New Zealand*) to the railway in a striking mainline triple-header. Once there, the three locomotives went on to 'top the bill' at the line's gala event. The visit concluded with two days of the ever popular 'driver experience' courses.



Edward J Dyer

SJ Town



**'The Cathedrals Express',
11th November 2011**

Northampton to Canterbury
1Z72 charter for Steam Dreams
495 miles run

Suitably adorned with a poppy wreath, *Tornado* headed for the Kent coast and Canterbury on a dismal November day on a working for Steam Dreams featuring a non-London origination point. The wet weather highlighted how difficult adhesion conditions can be at this time of the year as another pacific loco working in the area (Battle of Britain class 34067 *Tangmere*) slipped to a standstill and incurred heavy days. Thankfully *Tornado* managed to dodge that sort of trouble and, other than an 18 minutes late arrival back in Northampton, generally ran to time throughout her long day.

**'The Cathedrals Express',
24th November 2011**

London King's Cross to York
1Z30 charter for Steam Dreams
431 miles run

What should have been a routine working on home territory evolved into a slightly more colourful day out due to the midweek steam ECML ban imposed by Network Rail some weeks earlier (following a series of line side fires). Compromise was the name of the day as, following a diesel-hauled departure from King's Cross, *Tornado* was allowed to work the train north of Peterborough direct to York (arriving two minutes early). For the return journey, the GE & GN joint line was gained at Doncaster for a wander via Gainsborough before rejoining the ECML proper at Newark for the evening sprint back to the capital, arriving a mere five minutes late.



Alan Weaver

TORNADO ON TOUR *by Graham Nicholas*

'The Cathedrals Express', 26th November 2011

**London Paddington to Shrewsbury
1Z31 charter for Steam Dreams
479 miles run**

An entertaining and imaginative routing saw *Tornado* heading along 'Brunel's billiard table' as far as Bristol and the Severn Tunnel before heading north along the attractive Welsh Marches, giving passengers options to spend the day in Hereford or Ludlow as an alternative to the Shropshire county town destination. Although the weather was a little dull, it was a good day to be line siding as 6024 *King Edward I* was also in operation on the route that day. On the return home, an operational delay resulted in *Tornado* being 74 minutes late at one point; but this was mere incentive to the crew who managed to recover nearly 40 minutes of this in an entertaining run back along the Great Western mainline to London.



Peter Lovell



Ian McDonald

'The Cathedrals Express', 12th December 2011

**Chertsey to Ely 1Z63 charter for Steam Dreams
383 miles run**

In another non-London start for Steam Dreams, *Tornado* picked her way through the south London suburbs and along the North London line to join the Great Eastern mainline in bright and crisp sunshine. No great operational problems were encountered with a five minutes early arrival being posted at Ely. The return run was almost as good with the only delays of any note being picked up towards the end of the day.

'The Cathedrals Express', 14th December

**London Victoria to Sherborne/
Yeovil 1Z25 charter for Steam
Dreams 365 miles run**

A day of somewhat different fortunes in contrast to the serene progress of just 48 hours previously. A badly clinkered fire led to a significant delay at Salisbury on the outward run. With the schedule only allowing two hours to turn *Tornado* around at Yeovil, it was almost inevitable that the return run started out late. But it then descended into near farce after Woking when the promised 'fast' route back to London (to regain time) did not materialise and the seriously late train was eventually diverted into London Waterloo instead of its planned destination!



Derek Squire

'The Cathedrals Express', 17th December 2011

Ashford to Bristol 1Z86 charter for Steam Dreams 632 miles run *Tornado's* day began in the unlikely company of the London-Paris/Brussels Eurostar trains at Ashford International station. Otherwise, the locomotive put in another workman-like performance along the Great Western mainline to reach the elegant surroundings of Bath and Bristol only two minutes behind schedule.



Steve James



ian McDonald

'The Cathedrals Express', 19th December 2011

Basingstoke to Norwich 1Z31 charter for Steam Dreams 439 miles run

A further jaunt into Great Eastern territory for *Tornado*; however unlike a week previously, the journey out traced the route of the old 'Cambridge Buffet Express' via the ECML as far as Hitchin. Beyond Cambridge the A1 struck out for Norwich via Thetford to arrive only four minutes late. The return running (this time via Bishops' Stortford) was every bit as good – until *Tornado* and her train were set down behind a late running stopping service on the North London line, leading to an undeserved half hour late arrival back at her destination.



ian McDonald

'The William Shakespeare', 30th December 2011

London (Paddington) to Stratford-upon-Avon 1Z27 charter for UK Railtours 393 miles run

Tornado was allocated this additional working owing to the planned locomotive 6024 *King Edward I* being ruled 'out of gauge' (ironic, as this was a day spent largely on former Great Western territory). And, despite the disappointment of a few Swindon die-hards, our Eastern Region interloper acquitted herself well, arriving both at her destination and on the return to London four minutes early. Her year's work completed in fine style, the next day *Tornado* ran light engine to the Mid Hants Railway for her annual winter maintenance work.





AI 60163 *Tornado* rests under Brunel's magnificent roof at Paddington Station after arriving with 'The Cathedrals Express' – London Paddington to Ludlow and return – on 26th November 2011.

2012 TOURS DIARY

Below are the future operations **Tornado** is confirmed to be involved in. More details will be published on www.a1steam.com as trains are finalised. The contact details for tour promoters appear at the bottom of the page.

- **Saturday 25th & Sunday 26th February** - Mid Hants Railway - two days running in service
- **Saturday 10th March** - 'The Cathedrals Express' - London to Exeter and Plymouth (double-headed with No. 71000 *Duke of Gloucester* Paddington to Plymouth and return to Taunton) – promoted by Steam Dreams
- **Thursday 29th March** - 'The Cathedrals Express' - London to York and return - promoted by Steam Dreams
- **Wednesday 4th April** - 'The Cathedrals Express' - Peterborough to Salisbury and return - promoted by Steam Dreams
- **Friday 6th to Tuesday 10th April** - Nene Valley Railway, Peterborough
- **Friday 13th to Sunday 15th April** - 'The Fab Four' steam gala with LNER class A1, A2, A3, A4 line-up, Barrow Hill Roundhouse, Chesterfield
- **Saturday 21st to Sunday 29th April** - 'Steel, Steam & Stars III' at the Llangollen Railway, Llangollen
- **Thursday 10th May** - 'The Cathedrals Express', Colchester to York and return - promoted by Steam Dreams
- **Saturday 12th May** - 'The Cathedrals Express', London to Ludlow and Shrewsbury and return - promoted by Steam Dreams
- **Saturday 26th to Monday 28th May** - Preston Guild at the Ribble Steam Railway, Preston
- **Saturday 2nd June to Tuesday 5th June** - Railfest at the National Railway Museum, York
- **Wednesday 6th June** - 'The North Briton', York to Edinburgh and return - promoted by the AISLT (bookings not yet open)
- **Thursday 7th June to Sunday 10th June** - Railfest at the National Railway Museum, York
- **Saturday 30th June** - 'The Cathedrals Express', London to Durham and return - promoted by Steam Dreams
- **Thursday 5th July** - 'The Cathedrals Express', Lewes to Oxford and return - promoted by Steam Dreams
- **Thursday 9th August** - 'The Cathedrals Express', London to Gloucester and Cardiff and return - promoted by Steam Dreams
- **Saturday 11th August** - 'The Cathedrals Express', London to York and Scarborough and return - promoted by Steam Dreams
- **Wednesday 29th August** - North Norfolk Railway for their gala - Friday 31st August to Monday 3rd September
- **Saturday 29th September** - 'The Cathedrals Express', London to Kingswear and return - promoted by Steam Dreams
- **Saturday 20th to Tuesday 30th October** - East Lancs Railway, Bury

The Trust respectfully requests that anyone wanting to see **Tornado** follows the rules of the railway and only goes where permitted.

The following tour operators and preserved lines are involved with the operations listed above:

Steam Dreams

Web: www.steamdreams.com Tel: 01483 209888
Email: info@steamdreams.co.uk

North Norfolk Railway

Web: www.nnrailway.co.uk Tel: 01263 820800
Email: enquiries@nnrailway.co.uk

Barrow Hill Roundhouse

Web: www.barrowhill.org Tel: 01246 472450
Email: project_man@barrowhill.org.uk

National Railway Museum

Web: www.nrm.org.uk
Tel: 08448 153139
Email: nrm@nrm.org.uk

Mid Hants Railway

Web: www.watercressline.co.uk Tel: 01962 733810

Nene Valley Railway

Web: www.nvr.org.uk Tel: 01780 784444
Email: nvrorg@nvr.org.uk

Preston Guild

Web: www.prestonguild2012.com Tel: 01772 903605
Email: guild2012@preston.gov.uk

East Lancs Railway

Web: www.eastlancsrailway.org.uk
Tel: 0161 764 7790
Email: admin@east-lancs-rly.co.uk

Llangollen Railway

Web: www.llangollen-railway.co.uk
Tel: 01978 860979
Email: llangollen.railway@btinternet.com
Visit www.6880.co.uk for more information or to book tickets

MERCHANDISE UPDATE by Gill Lord

Here we are into 2012, so perhaps a look at 2011's highlights on the merchandise side is called for!

The year started for us with a new venture into model railway exhibitions with a stand at the Festival of British Railway Modelling at Doncaster in February, followed by a weekend at the London Festival of Railway Modelling at Alexandra Palace, what a magnificent building! These events are very different to our usual heritage railway visits, but most enjoyable, with good sales. We will be attending the British Railway Modelling at Doncaster this year on Saturday 10th and Sunday 11th February, if you are there, please come along and say hello.

Move forward to late May when we visited the NYMR, which happened to coincide with the railways 175th Anniversary celebrations. The rain was very much in evidence, but the new roof at Pickering made sure we kept dry! It was here that the Hornby *Tornado* was launched, along with the Haynes *Tornado Manual*, both of which continue to sell very well.

On to June to Didcot for the covenanter's day, lovely weather with plenty of photo opportunities, very important for merchandise use! The sales here were exceptional thanks to covenanters support.

Forward a few weeks to the end of June when *Tornado* was at the West Somerset Railway for the weekend. We are always made very welcome by the staff and people of Minehead and it didn't rain this time!

Then a run of main line trips, after which on the 26th August, back to Minehead for a further eight days. Weather rather more inclement this time, volunteers having to wrap up well and wear their *Tornado* fleece!

In September Bachmann launched their 'N' Gauge *Tornado* at the International 'N' Gauge Model Show at the Warwickshire Exhibition Centre. We still do have a few in stock.

Another couple of trips then to Model Rail Live at one of our favourite venues, Barrow Hill, extremely busy, smoky and noisy but very enjoyable.

A few more main line trips then a visit to the Severn Valley Railway. This was another magnificent event, plenty of customers and a lovely warm welcome by the station staff at Kidderminster.

Back to the main line again, for the final trips for 2011, the posting out of 322 on-line and postal orders in November and



Neil Whicker

The well-stocked merchandise stall at the 2011 convention, Barrow Hill.

December and here we are at the start of 2012!

To have stands at the events, sell on the trains and process our orders we have to have volunteers and I want to say a very big THANK YOU, to all those dedicated volunteers who's alarms went off at ridiculous o'clock in the morning just to be there at the start of the day to work for *Tornado*.

Even with this dedicated band of volunteers, we were unable to find a team for the 17th December trip but we did have a representative aboard who talked to the passengers and handed out our leaflets. The 30th December also proved difficult, but we did manage to find a good team eventually!

If you would like to help with the merchandise team, please contact me at gill.lord@alsteam.com we do have a lot of fun!

For the next season, I am hoping to introduce more items to our sales list:

- Car stickers
- Scarves for ladies
- More items for children: jigsaws, books, etc
- Corgi Die Cast *Tornado*
- Big Jigs wooden *Tornado*
- Pewter 'N' gauge *Tornado*

We will be taking delivery of the new Hornby 'Tornado Pullman' train pack very soon and later in the year a Hornby Special Edition late crest Brunswick Green *Tornado*.



Photo courtesy of Hornby

The Limited Edition Hornby Railroad model of *Tornado*, featuring late-crests, will be available later in the year.

FOR SALE 16 TORNADO SMOKEBOX NUMBERPLATES



All have been carried by Tornado and are available at £200 each.

Dates available:

- 24th April 2010 - 6th May 2010, Shildon
- 9th October 2010, Annual Convention, Barrow Hill
- 4th December 2010, 'Bath Christmas Market Special', Bedford to Bath & Bristol
- 3rd July 2011, 'Torbay Express', Bristol Temple Meads to Paignton & Kingswear
- 10th July 2011, 'Torbay Express', Bristol Temple Meads to Paignton & Kingswear
- 17th July 2011, 'Torbay Express', Bristol Temple Meads to Paignton & Kingswear
- 6th August 2011, 'The Cathedrals Express', London Euston to Worcester
- 26th August - 10th September 2011, West Somerset Railway
- 15th September 2011, 'The Cathedrals Express', Woking to Lincoln
- 11th November 2011, 'The Cathedrals Express', Northampton to Canterbury
- 24th November 2011, 'The Cathedrals Express', Peterborough to York to London King's Cross
- 26th November 2011, 'The Cathedrals Express', London Paddington to Shrewsbury
- 12th December 2011, 'The Cathedrals Express', Chertsey to Ely
- 14th December 2011, 'The Cathedrals Express', London Victoria to Sherborne
- 17th December 2011, 'The Cathedrals Express', Ashford to Bath
- 19th December 2011, 'The Cathedrals Express', Basingstoke to Norwich

To secure your number plate (all profits to Tornado) email shop@alsteam.com.

Covenantors' Diary *by Alexa Stott*

It may appear to have been a quiet time on the Covenantor front since the Convention but looks can be deceiving!

Since the announcement at the Convention that we were planning to set up a group for younger *Tornado* fans, we have been working hard to make the Tornado Team a reality and just before Christmas we recruited our first Team members. They will be receiving their welcome packs shortly and we are looking forward to arranging our first Tornado Team day with them. This will be an opportunity for young people to

spend a few hours with the engine at a preserved railway, meet some members of the team who look after *Tornado* and learn a little about the work that goes on behind the scenes. When we are up and running properly we will also be producing a dedicated newsletter which I hope Tornado Team members will contribute to themselves.

I do believe this may be one of the Trust's most important initiatives to date. To quote directly from the information leaflet circulated to Covenantors before Christmas "Here at the Trust we

"Take me by Tornado!" Two young fans admire Tornado at Barrow Hill.



Ken Horan

WHAT HAVE WE DONE?

by Graham Nicholas

“And so this is Christmas, and what have we done?” As I write this, the Christmas/New Year festivities are in full swing and John Lennon’s contribution to the repertoire of seasonal melodies wafts over the air waves. Being a time for contemplation and reflection that’s a thought provoking question – what have we done?

What we’ve done of course is to build the UK’s first mainline steam locomotive in 50 years and operate it successfully over the last three seasons. But haven’t we actually ‘done’ a whole lot more than that?

Top of my list is proving the impossible is possible and is doing so provided inspiration to many others since *Tornado* took to the rails in late summer 2008. The number of ‘new build’ projects has mushroomed since with many existing projects getting shots in the arm. 2011 will go down as the year that the Great Western Society’s wonderful rebuild of steam railcar No.93 was launched (and we were there at Didcot to celebrate with them). Before the end of the decade there will almost certainly be a second ‘new’ mainline steam locomotive (maybe

it’ll be ours?).

In echoes of the famous LNER publicity machine of the 1920s/1930s we provided a worldwide good news story and in doing so created a brand (not something I ever recognised previously but I absolutely understand now the power of such a thing). *Tornado* became a television star with her appearance on the *Top Gear* programme and has featured in her own 30 minute TV documentary programme *Absolutely Chuffed: the Men Who Built a Steam Engine*, first shown on BBC4 and BBC2 [and now available in extended form on DVD from the Trust’s on-line shop at www.alsteam.com – editor]. Did we ever quite imagine doing that during the long, silent years of building?

In my childhood, we would always have a houseful as we hosted a friends and family Christmas party. One regular attendee was ‘Uncle’ John (you know, one of those uncles who wasn’t really an uncle?). Uncle John was a great railway enthusiast who loved nothing better than to be in one of the leading coaches of a steam-hauled train with the windows open, soaking up the sounds of a hard-working locomotive. And



Ian McDonald



Bringing *Tornado* to the masses, 60163 storms past Frinkley Lane with BBC *Top Gear*’s ‘Race to the North’ special.

With the spectacular backdrop of the Pennines, A1 60163 *Tornado* crosses Lunds Viaduct with 'The Border Raider'.



the three-cylinder syncopated 'chatter' of an LNER pacific was a particular favourite.

Years later, sat in the privileged vantage point of *Tornado's* cab at Loughborough in 2008, I spotted Uncle John a little distance away, camera in hand. Too far away to make eye contact so I listened to a lovely little exchange. "You'll be sick of the sight of it soon, John", laughed one of his mates. He shook his head and all he could say was "this is just incredible...". I'll swear that at that moment I saw his eyes moisten. Sadly, Uncle John died a few months ago but he lived to see an A1 re-born. Yes, we've made grown men cry.

As a Board, we took stock of the situation three years ago as we prepared for the launch of the locomotive. We predicted that the Conventor support would gradually diminish once the locomotive was a built; it hasn't, it has done the exact opposite in fact. And we

certainly did not predict a situation where merchandise income would contribute up to a third of the project's income. In the lead up to Christmas this year I had no difficulty at all in selling a number of Haynes Manuals to colleagues at work. Sure they were engineers and naturally interested. But just the sight of the name *Tornado* on the front cover and the feel of a luxuriously produced quality product led them to part with their hard-earned cash without a moment's hesitation. We've created a name that sells.

Of course, none of this is possible without the locomotive continuing to perform and be in the public eye. The last three years have seen the locomotive travelling to all points of the UK railway globe with too many performance highlights to mention (although the northbound assault on Shap followed by the southbound sprint up to Ais Gill

summit on 24th June 2010 will live long in my memory). We've endured and come through our first round of major repairs and, as the locomotive closes in on 50,000 miles run it's an interesting thought to consider how much of our locomotive has already been replaced and is therefore no longer 'new'!

Even as I write this, somewhere in a foreign (Southern) railway yard that is a corner that is forever LNER. Dedicated support crew members and merchandise sales teams are forsaking/escaping the turkey and brussel sprouts and instead dosing down 'on the cushions' in order to ensure that *Tornado* is turned out in her usual splendid style for her last mainline turn of the year. The legend shall endure.

John Lennon is coming to a close: "A very merry Christmas and a Happy New Year, let's hope it's a good one without any fear'. Amen to that. **TCC**

THE LONGEST DAY – 'THE CALEDONIAN TORNADO'

by Mike Notley

On 21st September 2011 *Tornado* undertook one of the most ambitious tours ever undertaken in a day by steam in preservation. Not the fastest, not the heaviest train but probably the longest mileage and also including the formidable climbs of Shap and Beattock Banks in both directions. Mike Notley was onboard and here he tells the story of a remarkable never to be repeated day.

It was a rather subdued group of people who congregated on platform 5 at Crewe soon after 6 o'clock on a cold, dark morning. I was one of them and had been persuaded to abandon a warm bed in a nearby hotel by the prospect of over 500 main line miles behind *Tornado*. HF Railtours 'The Caledonian Tornado' on 21st September 2011 was probably main line steam's most adventurous one-day tour yet, a marathon trip from Crewe to Glasgow and back that would test the stamina of the locomotive, its crews and passengers alike. But if we thought it was a long day for us, spare a thought for the support crew who could add a significant number of hours to both ends of the journey. And, I suppose, a 'one-day' trip was a misnomer in that we weren't booked back into Crewe until 01:08 the following day. Being of a rather pessimistic disposition and long experience and despite the professional planning that had gone into this trip, I had some doubts that, so early in the morning, everything would go smoothly and that we would be away on time at 06:19 so it came as a pleasant surprise when *Tornado* brought her 13 coach train into the platform shortly after 06:15. I took my allotted spot standing by the window in the vestibule end of the support coach and shortly before 06:21 and less than two minutes late, the adventure began. The outward run to Preston was to be made via Manchester Victoria, Bolton and Warrington and DB Schenker Driver Pete Sheridan made good use of *Tornado's* power as the darkness began to fade and mileposts became easier to see. An extremely liberal allowance after Stockport saw us arrive in platform 3 at Manchester Victoria a whopping 14 minutes early but, because this was a pick-up point, we had to wait until our booked departure time so as to be certain not to leave anyone behind. That famous law then dictated that, having had to give away our advantage, we should suffer two signal stops en route to Preston and arrived

almost three minutes late. *Tornado* was watered at Preston, a process that involves detaching the loco and running it to the Goods Loop platform on the east side of the station. This obviously takes a little longer than the usual Formula 1 pit stop time of *Tornado's* regular watering team Bells & Two Tones, and allowed passengers the opportunity of a leg-stretch and a breath of what passes for fresh air before the serious part of the journey began.

Those famous laws

Parkinson's Law says that work expands to fill the time available to do it but this can't be applied to watering at Preston. My experience is that, regardless of the time allowed, it is invariably exceeded due to the movement delays at this busy station. And so it was no surprise to leave Preston almost six minutes late, bright early morning sunshine bathing the surrounding countryside as we made a superb run to our next pick-up stop at Lancaster. The gradients on this section are of no real significance and the AI could undoubtedly have run a lot faster but had to content herself with an average of 73.6mph between Mileposts 6 and 19 and a maximum of 76. The first 20 miles were covered in exactly 20 minutes and we reached Lancaster, just under 21 miles, in 21 minutes and 56 seconds. This took three minutes out of the deficit and left us almost five minutes of station time for a punctual restart. But, if Parkinson's Law had not applied at Preston, Murphy's Law did at Lancaster for, although we were ready to go on time, this coincided with the arrival of a late running local service from Morecambe which was given priority as it crossed our bows from the Up Main into platform 2.

Grayrigg and Shap

Now while Shap usually attracts all the attention as far as enthusiasts are concerned, most footplatemen have even more respect for Grayrigg. This 13 mile climb calls for sustained hard work if it is to be surmounted in style but this has to be coupled with the need to have the boiler and the fire in good order for the climb of Shap only six miles away. Fortunately, today, this wasn't a worry as we were booked a water stop in Oxenholme loop, halfway up the climb. But this did mean that the last seven miles or so of climbing had to be taken on



from a dead stand and, of course, it was almost 'nailed on' that the weather Gods would intervene and provide rain and a freshening westerly wind as we left the loop. Despite the weather, *Tornado* did well on what remained of the climb, working up to 40mph on the 'easier' gradients to Docker Garth's Viaduct before falling back to a respectable 35mph on the final two miles of 1-in-106 to Grayrigg Summit. The way in which a steam train recovers speed through the Lune Gorge is a pretty good indicator of how they have survived Grayrigg and *Tornado* was soon running in the mid 50s as we curved through this famous section of line. And then, soon after Low Gill, Driver Sheridan asked her to accelerate and she responded willingly, striding past the site of Tebay station and onto Shap at 70mph. As we ran onto the exposed flanks of Shap Fell, the train was buffeted by what had now become a very strong westerly wind which drove the rain into the west side of the train and made timing from a slightly open window rather unpleasant. The climb to Shap Summit begins around Milepost 31 ½ with

A1 60163 *Tornado* races north with 'The Caledonian Tornado'.



1¾ miles of I-in-I46 and it was a little disappointing that speed should be allowed to fall to a fraction over 60mph on this section. But now the A1 was digging in on the I-in-75 as speed fell away and we were down to the mid 30s as we passed the lonely site of the former Scout Green Box. This is the location of a flange lubricator and, recently, this has had a tendency to induce slips for northbound steam locomotives. *Tornado* was no exception, but the slip was expertly caught by Driver Sheridan and power was quickly reapplied. And now the sun made a feeble attempt to peer through the scudding clouds as *Tornado* forged steadily on, reaching the relative haven of the rock cutting just short of the summit which gave some welcome shelter from the wind and rain. The absolute minimum was 29½mph as we passed Milepost 37 and soon we were bowling along the helpful gradients towards Carlisle. It had been a sound rather than spectacular climb but given the load, the weather and the questionable rail conditions, it was a task professionally completed. The descent

to Carlisle saw the weather brighten up briefly but as we arrived in platform 1 for our crew change, it was raining steadily again and would continue to do so for most of the remainder of the run to Glasgow.

Beattock

As we made our way to another water stop at Lockerbie, the weather deteriorated further and thoughts turned to the climb to Beattock Summit. Ten miles of gradients ranging from I-in-88 to I-in-69 with a load exceeding 500 tons is challenge enough in good conditions but the steady rain made rail conditions unreliable and provide a stern test for Carlisle Driver Brian Grierson. It was a test that he passed with flying colours. We met the rising gradients at Beattock South at a fraction over 61mph and were two miles into the initial stretch of I-in-88 and doing 48mph when *Tornado* slipped. Although power was quickly reapplied, speed fell away quickly and we lost 10mph over the next three-quarters of a mile. Now the gradient tightened to I-in-79

and the natural decline in speed continued until, around Milepost 43½ and with over six miles of climbing still to go, we were down to 27mph. And then 60163 slipped again and again the slip was caught and *Tornado*'s steady beat rebounded from the nearby hills. Now we were down to 25mph, the gradient was I-in-74 and the rain was getting heavier. But the rhythm of the A1's exhaust steadied as speed settled around the 24mph mark and we forged on up the hill. Milepost 46¾ slipped by. Three miles to go and she slipped again, the sudden increased draft on the fire and brief closing of the regulator combining to make her safety valves lift, testimony to the skill and hard work of Fireman Steve Hanszar. The GPSs were now showing 23mph but Driver Grierson and *Tornado* had conceded as much as they were prepared to and even another couple of slips couldn't slow them any further. The rain was now torrential but speed began to creep up to 25mph as we cleared the last mile of I-in-74/77. All this fine handling of the locomotive in the most difficult weather conditions imaginable

and without using any sand either! The easing of the gradient to 1-in-835 for the final quarter of a mile to the summit saw a further increase to 27mph and soon we were running quickly downhill towards our booked pathing stop at Carstairs. This only lasted for six minutes but allowed a Pendolino and a Voyager to pass us before we began the final leg of the outward journey to Glasgow. We left the WCML at Law Junction and made our way into the outskirts of Glasgow by the 'pretty' route. This involved much slow running but we had a decent road and came to a stand in platform 11 at Glasgow Central a few seconds before 14:30, some eight hours and nine minutes after leaving Crewe. It had been an exciting, enjoyable, occasionally tense, sometimes frustrating run but, as her passengers drifted away to seek refreshment, what they didn't know was that they were about to be part of railway history.

THE RETURN JOURNEY

After a break of four hours in Glasgow and 12 hours since we had set out from Crewe, we began the return journey. Again we were pathed along secondary routes as far as Law junction and it wasn't until we left Carstairs Up Passenger Loop that things began to liven up. Fortunately the weather Gods had relented a little and it was dry with the strong westerly wind having dropped a little as we eased through Carstairs station and began the long climb to Beattock Summit. Southbound, the gradients are nowhere near as steep as in the other direction and we worked up to 56mph on the level at Milepost 72 before falling back to a fraction over 53 up the subsequent 2 miles of 1-in-150. 69mph in the dip before Thankerton provided useful impetus and we cleared the 1½ miles of 1-in-100 that followed at a minimum of 63½. Things were beginning to get interesting! 76mph

in the dip at Lamington was followed by excellent work up the variable but always adverse gradients towards Abington and it was only when we reached the steeper gradients above Crawford that speed fell below 70. And then, as a mile and a half of 1-in-142/152 dragged us back to 67mph, the rip from the Kylchap exhaust had to be heard to be believed as we accelerated to just a fraction under 75mph on the level at Milepost 52.

A very exclusive club

Now we were within two miles of the summit, the gradient was 1-in-99 and speed was falling only slowly. Even to the uninitiated it was obvious that this was something special. Milepost 50, the top of the climb, flew by at 66mph and when Driver Grierson eased the regulator, *Tornado's* safety valves lifted. The need to concentrate on timing as the mileposts flew past on the fast descent that followed,

Frank Yates



In glorious autumn sunshine, AI 60163 *Tornado* approaches Chorley.

In worsening weather conditions A1 60163 *Tornado* arrives at Oxenholme.



prevented much detailed thought of what had just been achieved. As we came to a stand in Lockerbie Loop after the mandatory slow approach, we had covered approximately 48¼ miles from the Carstairs stop, including the almost continuous 24-mile climb to Beattock Summit in 47 minutes 28 seconds, a start to stop average of 61.0mph. It doesn't get any better than that. Or does it? Later analysis of the last few miles to Beattock Summit confirmed what I had suspected, that *Tornado* had joined the very exclusive '3,000 Club', the first recorded instance of an A1 to do so. The figures showed that between Mileposts 53 and 50, she had averaged around 2,540 edhp (equivalent drawbar horsepower) or very close to 3,100 ihp (indicated horsepower). That this had been achieved in the course of a normal run and without special preparation or intent is testimony to the efficacy of some of the recent changes. And when, some time later, I spoke to Driver Brian Grierson, he was blissfully unaware that he and Fireman Steve Hanszar had written themselves into steam's history books. Brian confirmed that boiler pressure had been around 240-250psi all the way up the climb with the reverser set at 35% rising to 38% and then 42% for the final few miles to the summit.

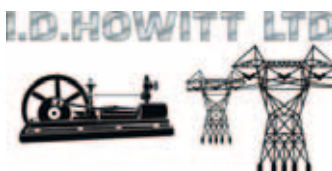
A memorable day

And so the journey south continued as the light began to fade and timing became

increasingly demanding. The southbound climb to Shap was made in dry conditions with the westerly wind having died away at nightfall. However the rain and wind had returned by the time we dropped off passengers at Lancaster and midnight came as we stood in Preston station where *Tornado* was once again detached to take water. The journey from Preston to Crewe began with some good running but the run in from Warrington was spoiled by numerous signal checks and a long period of cautious running as we examined the line, the driver of a preceding train having reported a 'bump'. As in most of these cases nothing was found but it is better to be safe than sorry. So, eventually, we arrived back in platform 5 at Crewe at 01.51, 19½ hours after we had left. There was time for a well-deserved thank you to the footplate and support crews before making my way to my hotel, thankfully close to the station and, after a much-needed cup of tea and a shower, collapsing into bed at around 02:30.

It had been a very long but memorable day. *Tornado* and her crews, both footplate and support, had performed brilliantly. On the basis that the longer your head is above the parapet the more likely it is to be shot off, steam had survived a very high-risk run, and given recent difficulties for steam in the summer of 2011 was what was needed to show that high quality planning matched with high quality delivery can still get the job done. Perhaps not a trip to do too often though... **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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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 covenants 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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