



The A1 Steam Locomotive Trust  
New Steam for the New Millennium

# The Communication Cord

No 4 *Newsletter of The A1 Steam Locomotive Trust* November 2005

Attached to this Edition is a Special Supplement giving details of the presentations made to the Annual Convention in Darlington on Saturday 1<sup>st</sup> October 2005

It is with great sadness that we report the death, in hospital on 21<sup>st</sup> September aged 57, of Carol Wilson, the wife of our founder Chairman, Michael Wilson. They met during their service in the RAF and were together for 34 years towards the end of which Carol contracted lung cancer. Carol was Covenantor No 98 and was very much to the fore during The Trust's formative days. Those who recall the early Newsletters and Journals will remember her name in the list of contacts as responsible for general enquiries, subscriptions, non-covenanting members and Journal distribution. Without the support of Carol and those like her, especially in the early days, The Trust might well not have succeeded in the way we have seen. We offer our sincere condolences to Michael and his family at this time of loss and sadness. Our prayers are with them.

## Editorial

Firstly, I offer my personal condolences along with those of The Trust generally (see above) to Michael Wilson and his family. How sad that Carol will not now be able to see the completion of the project to which she gave so much.

A Covenantor has commented that earlier editions of The Communication Cord have not given a general Trust contact telephone number or e-mail address. I am happy to address that omission. The information is shown in the box opposite, and will be included in all future issues.

Work has now started on compiling the history of the project to build the 50<sup>th</sup> Peppercorn Class A1 express passenger pacific steam locomotive. At present, research is concentrating on the period between the demise of the original A1s in June 1966 and the launch of the project in November 1990. We have information about pre-launch activity going back to late 1987, but we are anxious to know of any articles or letters printed between 1966 and 1990 in the railway press or elsewhere bemoaning the failure to preserve a Peppercorn A1. Please let me know (see box opposite) if you are aware of any such material.

*John Hartley*

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## Great Minds Think Alike

In three major Trust announcements this year, senior officials of organisations we have done business with have all commented favourably on The Trust. Their words bear repetition. Herr Jurgen Eichorn, Works Manager, DB Meiningen said '...We are delighted and feel very honoured to have received the order for *Tornado's* boiler from The A1 Steam Locomotive Trust...'. Andrew Cook, Chairman of the William Cook Group, said of his decision to sponsor the tender 'I am delighted to continue supporting The A1 Steam Locomotive Trust in its project to build a new mainline steam locomotive in the 21<sup>st</sup> century. *Tornado* will ... be a great example of how persistence and determination – my motto – wins through in the end. ...'. On the agreement to run *Tornado* in at The Great Central Railway, its Chairman, Tony Sparks, said 'We're thrilled to bits. .... This *Tornado* is a storm every railway enthusiast is looking forward to!'

I'm sure we all share the collective delight of senior businessmen and a leading heritage railway personality.

## Highlights from the Convention (see Supplement for full report)

- 192 people attended the 2005 Convention.
- *Tornado* is on schedule but £350,000 is still needed if we are to finish as planned.
- 321 people (including 259 Covenantors) have subscribed to the Bond.
- The first *Tornado* passenger train on the GCR will be for Covenantors only.
- Works Open Days are to continue on into 2006.
- Covenantors are to be given an A1 Trust Card that will give free entry to Darlington Railway Museum.
- Work on *Tornado* will now be concentrated between the frames in preparation for the boiler delivery.
- Manufacturing work has now started on both boiler and tender.
- Certification work is well in hand.
- Operational testing from 25mph to 60 mph is planned on the GCR.
- Operational main line testing up to 90 mph is planned.

## Certification Progress

Graham Nicholas, Quality Engineering Director, writes: 'our Railway Group Standard derogation application was due to be heard at RSSB (Railway Safety & Standards Board) Traction & Rolling Stock subject committee on Friday 21st October when The Trust was to be represented by Tony Broughton (author of the document) and Bob Bramson (our man at AEA VAB). A successful outcome should result in us knowing more precisely which UK Railway Industry Standards we must comply with and which we will be formally exempt from. RSSB periodically hears derogation applications for other steam and heritage locomotives, but this will be a 'first' for the industry because ours is a new locomotive as opposed to a restored, existing one.

As I reported to the Convention, after completion of the boiler redesign work by DB Meiningen, the design has now been approved by TÜV, the German Notified Body, acting within the terms of the EU Pressure Equipment Directive. Four approved design packs were sent to us one of which was forwarded straight on to Her Majesty's Railway Inspectorate (HMRI). It has completed a review and satisfied itself that the German boiler design code is a suitable basis on which to approve our boiler for use in the UK, and has now advised us formally that HMRI has no objection in principle to the boiler being constructed to this design.'

## Barrow Hill Roundhouse Autumn Gala on 8<sup>th</sup> – 9<sup>th</sup> October

The Trust attended the Barrow Hill Steam Gala on October 8<sup>th</sup> and 9<sup>th</sup>. The event was well patronised, and our stand attracted much interest with one visitor making a Bond purchase on the spot! Our thanks to Jon Pridmore for organising our part in the event and Charles Tremeer, Tony Watson, George May, John Rawlinson and David Elliott for their invaluable support.

## Exhibitions and Events Team

We had a good response to our call for volunteers for this new venture. All who contacted us should now have received an acknowledgement. We are putting together our plans for 2006 and will be in contact with everyone as soon as practical.

## Tornado Merchandise

<b>Sweatshirt</b>	£20.00 )	All items forest green with	( small medium large XL 2XL
<b>Polo Shirt</b>	£20.00 ) plus £2 p&p	<i>Tornado</i> badge (4½" x 3½")	(
<b>Fleece</b>	£30.00 )	shown in Top Link 12 page 25	( 35" 38" 41" 43" 46"
<b>Tie</b>	£15.00 including p&p	green with orange/black stripe (woven polyester)	
<b>Enamel Badge</b>	£2.50 including p&p (£2.00 if with other item(s) above)	(badge shown in Top Link 12 page 25)	

Send *full remittance* and order details, with phone no and/or e-mail address in case of query, to:

**Sales, The A1 Steam Locomotive Trust, Darlington Locomotive Works, Hoptown Lane, Darlington, DL3 6RQ.**

Allow 4 weeks for delivery of clothing items. Other items despatched as soon as possible.

## Mayday, Mayday!!!

Every month 'Denis the Fisherman' contributes to the building of *Tornado*. Denis, we are very grateful for your money, but please would you let us know who you are. The system we operate needs to recognise the Covenantor's name against the name that appears on our bank statement. As The Trust is a passive recipient of funds it is extremely difficult – and in some cases impossible – to match bank statement names to the names of our Covenantors. This matching is particularly important as we are unable to reclaim tax under the provisions of Gift Aid unless we have a Gift Aid Declaration signed by the Covenantor.

Having exhausted all the investigative avenues open to us, we issue this appeal to Denis and his 'crew' of other unrecognisables who are H & M J West, J West K7RF, J West S82F, W813197100, Karen Whitehouse and P806141202. These names and numbers all appear on our bank statements. Please write and tell us who you are so that we may afford you the recognition that your contributions deserve, and put a smile on the face of The Trust's administrators!



## The A1 Steam Locomotive Trust New Steam for the New Millennium

### **Special Supplement on the Covenantors' Convention held at The Dolphin Centre, Darlington on Saturday 1<sup>st</sup> October 2005**

192 people attended the Annual Covenantors' Convention, at The Dolphin Centre, Darlington on 1<sup>st</sup> October 2005, and were briefed on the Trust's great progress in the preceding year. Lunch was then served after which vintage buses were on hand for those wishing to visit Darlington Locomotive Works (DLW) to view the progress on the partially erected *Tornado*, talk to Trust officials and visit several stalls and displays.

Duncan Ross outlined the Convention agenda after which The Trust's Chairman, Mark Allatt, mentioned its honorary officers, senior management and Technical Advisory Panel members. He then recalled the launch of the £500,000 bond issue to which £314,000 had been subscribed so far; the order placed for the boiler design (now approved) and construction (now started); the £200,000 sponsorship of *Tornado's* tender by William Cook Cast Products Limited, *The Talisman* – rated 'the best steam railtour ever'; the recent Steam Railway cover story on *Tornado* and, latterly, agreement that post-construction tests and trials would take place on The Great Central Railway. He emphasizing that ***Tornado* was still on schedule to be completed in November 2007 and on the main-line in Spring 2008 provided the now reducing funding gap of £350,000 is bridged.**

#### **Finance and Administration**

David Burgess, the Company Secretary, said that Covenantor income was down slightly at £126,532 but overall income was up slightly at £154,130. At the same time a reduction in advertising expenditure and replacing some issues of Top Link with The Communication Cord had freed up an extra £5000 for locomotive expenditure. A trend of slowly rising Covenantor income and lower expenses was continuing. 321 people (including 259 Covenantors) had subscribed to the Bond and most were not claiming the interest! He then mentioned the Bachmann model and Covenantor certificates which were believed to be up to date, and The Trust's record system which was under review.

#### **Sales and Marketing**

The Marketing Director, David Bedding, having outlined the Marketing Team, began by reviewing exhibitions and events. Early Regional Meetings, staged in Darlington and Newcastle, had been poorly attended but more will be held. The Spring Day out had been at The Bowes Railway. The event of the year had been *The Talisman* and there were many to thank for its success: for pre-trip preparation – Gordon Best, Terry Greaves and Duncan Ross; for on-board duties – Mark Allatt, Norman Bradbury, Graeme Bunker, David Burgess, Alan Bradstock, Keith Drury, David Elliott, John Hartley, John Larke, George Norrie, Beulah Shaw and Colin Vickridge; at York Station and Locomotion at Shildon – Jon Pridmore; at

Darlington Station – Keith Crabtree, and at the DLW and Museum site – George Aitchison, Gordon Best, Chris Calver, Terry Greaves, Trevor Mumford, Norman Raine, Duncan Ross, Jean Ross, Barry Thompson, Charles Tremeer and Tony Woodger.

At the North Yorkshire Moors Gresley Anniversary Weekend we had to thank Derek Ashton, John and Elizabeth Gilbert, Maurice Henderson, Trevor Mumford, Ron Smith and Charles Tremeer, and at Locomotion's 'First Birthday' Trevor Mumford and Norman Raine.

Future events being organized by Jon Pridmore included attendance at Barrow Hill. Further 'Days Out' and steam excursions are being planned details of which would be circulated.

**The first passenger train to be hauled by *Tornado* would be on The Great Central Railway and would be for Covenantors ONLY!** Details would be announced later.

The first version of a Roll of Honor Board showing subscribers of 'standard' covenants was in place at DLW. The format was to be updated and improved and a similar roll of Dedicated Covenant subscribers was to be added. The Trust's website had been extensively updated and rewritten.

Two elements of the Marketing Team – the Image Archive and Publications were reviewed by Keith Drury, the Image Archive Manager. Speaking on behalf of John Hartley (Publications Editor), he mentioned that, in the past year, the first three issues of The Communication Cord and issues 11 and 12 of Top Link had been published. He then outlined the aims of the Image Archive (his area of responsibility), the way it would be kept and its structure in the shape of 'Albums' to include historic A1s; *Tornado* construction; The A1 Trust and its people, occasions and DLW; other locomotives and railways, and *Tornado* operations.

The Works Guides Manager, Charles Tremeer, then explained how the DLW Open Days help to spread the word about *Tornado* and raised our profile, especially locally. Guides helped by informing visitors about *Tornado* and enthusing them to support us. The scheme would continue once or twice a month with one or two Guides present. Thanks are due to the Works Guides: George Aitchison, Chris Calver, Phil Champion, Bernard Hinds, David Lowther, Trevor Mumford, John Perry, John Price, Norman Raine, Barry Thompson, Charles Vallance, and Tony Woodger.

David Bedding announced that, as soon they could be produced, an A1 Trust Card would be sent to Covenantors. It would entitle them to free admission to Darlington Railway Museum. He then outlined the Marketing Team's aims for the ensuing year: to grow covenantor numbers; revise and update The Trust's literature; further develop the Website and electronic communication; and seek out sponsors and make appropriate arrangements with them.

## Engineering

David Elliott, the Engineering Director, briefed on plans for the next 12 months and on progress with *Tornado* which had been affected by unplanned events. Ufone had been slow to complete the outside valve gear components, and the refitting of the footplating had proved more protracted than expected. On the other hand, support for the boiler procurement had led to the boiler contract being negotiated and signed. After three reviews held in Meiningen the boiler design was complete. Additionally, major work was underway on the boiler fittings to enable steam testing prior to delivery. A sponsorship deal had been negotiated with William Cook Cast Products Limited for the construction of the tender, and the front end of *Tornado* had been completed for Steam Railway photographs.

In the past year, work at DLW included completing the fitting of the crossheads, and nearing completion of the fitting of the outside connecting rods. Further work had been done on the reversing gear with the reverser stand now complete and working. Progress had been made on grinding valve gear components with the radius links ground but the rest awaited Ufone. On the outside valve gear, there had been good progress on the crosshead guides, valve spindles and pistons but the rest awaited completion of machining. On the inside crank pin and connecting rod, the pin had been honed and the rod was under way. Little progress had been made with fitting the inside valve gear due to financial constraints.

Off-site, project management of the boiler design and manufacture was well under way as was technical support for the tender procurement. We had quotations for boiler fittings, had established the certification route ahead of target, and the initial fittings were finished or under way. HSBC had donated brake system control equipment components, and we had made progress designing a detailed brake installation scheme.

Important targets in the next 12 months: to fit all brake gear and air pipework located between the frames - to achieve this, the air pumps and brake cylinders needed to be ordered now; to fit all steam and vacuum pipework between the frames - we had a satisfactory quote but needed the money in hand to allow an order to be placed; to complete the fitting of the inside connecting rod and machine, grind and fit the inside valve gear - work was being held pending the availability of the necessary funds; to balance the coupled wheels and find a suitable contractor **and** the money to pay for the work; and to complete the inside reversing gear with some components to be ordered when funds were available. We had to fit the boiler to the engine BUT all the outstanding work between the frames (as above) had to be completed first.

After negotiation, the boiler contract had been signed in January, and design reviews held in March, May and July. Work had been done on the banjo dome and the boiler design had been approved by TÜV Thuringia in September. The design was now with the VAB, HMRI and NRAB (see below) for comment. The flanged plates were in manufacture and the full start of the boiler assembly was due at the end of October with delivery to UK projected for early July 2006.

The tender sponsorship had been concluded in July 2005. The castings had been made by William Cook's Burton foundry and were being machined while the frames, the order for which had been awarded to Ian Howitt Limited in August, were also being machined. A model of the tank structure had been built to help us understand the design for conversion to welding, and Euroshuttle disc wheels were being sought.

## Certification

Graham Nicholas, Quality Engineering Director, summarized progress towards certification of *Tornado* by our designated Vehicle Acceptance Body (VAB) AEA Technology, Her Majesty's Railway Inspectorate (HMRI) and Network Rail Acceptance Board (NRAB) and mentioned the soon-to-be-introduced European Rail Interoperability Regulations. He had met our VAB's senior Vehicle Dynamics Engineer, had made a Railway Group Standards derogation application and was drafting our Quality Plan. He was drafting our Route Acceptance submission to NRAB and was working on our Boiler Certification Strategy with HMRI.

He had visited DB Meiningen in March as part of the design review process, and had completed an audit to establish its suitability as our supplier. We now had approval from the TÜV Notified Body under the European Pressure Equipment Directive 97/23EC for the boiler design - an approval accepted by HMRI for UK use.

## Operations

The Operations Director, Graeme Bunker, outlined details of the agreement with The Great Central Railway for *Tornado*'s first operations. After an initial period of light engine and loaded train running at 25mph with staged increments up to 60mph, the first private and public trains would follow with a 1000 miles of running in.

Our Main Line route acceptance strategy involved a 150 mile light engine test run followed by a first loaded test run at 60 mph, a second at 75mph with stepped increments on test up to 90mph. The initial view is York to Newcastle for higher speed testing.

*Tornado*'s first main line trip will be on the East Coast Main Line with the locomotive being eased in steadily. Traditional A1 routes will be used first after which we will seek regular contract work and spread our wings. Operations will require a Support Crew to include stewards. We will advertise for the Crew in The Communication Cord and Top Link. There will be no barriers but experience will be useful (a chef is vital). However, crew duty will not be a jolly!

The locomotive would be 13 feet high rather than 13 feet 1 inch making route clearance easier. 6,000 gallons of water allowed 100+ miles running. Designs for a Water Carrier/Support Vehicle were being progressed, but a traditional support coach would come first.

## Questions and Answers

Asked about 'Deeds of Covenant', a member of the Board explained that these had now been replaced by Gift Aid Declarations. A Covenantor felt suggestions for 'sales' campaigns had not been implemented. The Marketing Director said that all suggestions had been, and would continue to be, given full consideration. Another Covenantor said he had not been asked to increase his covenant. He was told he could increase it without being asked, but was assured the point would be followed up.

In conclusion the Chairman reminded the Convention that the Trust's mission was 'to build and operate a Peppercorn Class A1 steam locomotive for mainline and preserved railway use'. The £350,000 still needed to achieve it was far less than the current cost of overhauling a Class 8 pacific, and £500,000 had been raised *above covenanted income* that year.