



## The A1 Steam Locomotive Trust

New Steam for the New Millennium

# The Communication Cord

Newsletter of the A1 Steam Locomotive Trust

October 2004

## Convention Report

### Covenantors hear of operational plans for *Tornado*

**Operations** **Running-in turns to be on a 60mph preserved railway.** *Tornado* will then face 1 light engine test and 2 loaded tests *all on the main line* where contract work and A1 Trust tours are envisaged. The size and shape of the Support Crew is being assessed. The Crew will be recruited by late 2005 and trained in 2006/2007. The **big news** is that, using a staged approach through tests and a wider rollout, *we plan to seek approval for 90mph running on the main line!*

**Coal v Oil** **Coal fired loco first** Discussions with Banks have led the Board to the conclusion that the higher capital costs, coupled with the repayment schedule demanded by the banks and some uncertainties regarding Certification make going for an oil-fired locomotive an unattractive initial option. Oil is now dearer than coal, the boiler is designed for coal and certification of a coal-fired locomotive is more straightforward. Earnings from a coal-fired locomotive are lower, but early operational years should be **free of debt** and significant profits are projected from **year 5** onwards compared to oil as late as **year 11** ! Coal is now the only viable *first* option (oil is a long-term option as the steel firebox will allow conversion when required).

**Boiler** **Advice taken to safeguard vital details in translation of Design Contract into German.** Safety case and approval activities are already under way. The Engineering Director is the Principal Engineering Contact. Supported by a Board Sub-Committee, he will steer us through limited redesign to completion of a welded boiler with a steel firebox (the principle of welded boilers is accepted in UK through their use in Bulleid's Pacifics) that will meet EU requirements simplifying matters here later.

**Tenders** **Requests for Quotations for principal Tender issued.** The specification for the *second* Tender is the subject of wide debate on a range of questions quite apart from aesthetic considerations. How big a range do we plan for? Should it be just a tender or combined with a support coach? The aim is to have decisions made by, and invite expressions of interest in, Spring 2005.

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**Management Changes** *Andrew Dow* appointed as a Vice-President; *Graeme Bunker* as Operations Director, *David Bedding* as Marketing Director, *Graham Nicholas* as Quality Engineering Director and *John Larke* as Administration Director.

**Financial Highlights** Bond Issue raised £130,600 up to 4<sup>th</sup> October. Covenanted income steady at £12,000 per month, and expenditure on locomotive has topped £1 million!

**Quality Management** The route to certification of *Tornado* involves the Vehicle Acceptance Body (AEA Technology, Derby), the Rolling Stock Acceptance Board (part of Network Rail) and Her Majesty's Railway Inspectorate. To achieve certification, the Trust needs systems supported by a

Manual with fully documented sections on Design, Procurement, Manufacturing and Quality Assurance Procedures. Progress has been made with all 3 of the certification bodies, and the forthcoming year will see work on Railway Group Standards exemptions, on boiler certification, on an acceptance strategy to meet RSAB requirements, on the Manual and on the 90mph case.

**A full Convention report will appear in the next issue of Top Link.** The introduction of a Newsletter is covered in the Sales & Marketing column overleaf. Letters, comments and suggestions, please, to **Publications Editor, The A1 Steam Locomotive Trust, Darlington Locomotive Works, Hopetown Lane, Darlington, DL3 6RQ** or E-Mail to [editor@a1steam.com](mailto:editor@a1steam.com)

**Engineering 2003-2004** There were some unplanned tasks and some delays to work in 2003/4.

We had to re-centre a crank pin, re-metal two crossheads and thread the relief valve hole in the middle cylinder's rear face. Time had to go to boiler procurement support – including writing the specification for the interfaces between the boiler and the rest of *Tornado*.

Crosshead machining is complete, the cab is complete, there is substantial progress on cylinder drain cock gear, a start has been made on boiler fittings and pipe work and all the coupling and connecting rods are fitted except the RH connecting rod. Measurement of the locomotive for the valve gear (including working mock-ups to test valve events) is largely complete. Most components for the Reverser Stand have been delivered. Valve spindles have been ordered as has machining of valve heads, and the liners for the front section of the valve gear have been fitted. Reassembly of the footplating is 50% complete, and limited progress has been made on the bogie and Cartazzi running gear and on the machining of valve gear forgings. Crosshead and piston fitting was delayed by re-metalling (*see above*).

Beyond the targets set, the reversing rod was manufactured, the 1<sup>st</sup> Tender's specification was written and issued with requests for quotations, and we acquired a new gantry and electric hoist.

2004/5 targets (assuming current income level) are:

**At Darlington Locomotive Works** – complete fitting of crossheads and outside connecting rods, further work on reversing gear, grind valve gear components, fit outside valve gear, hone inside crank pin and fit inside connecting rod, and fit inside valve gear.

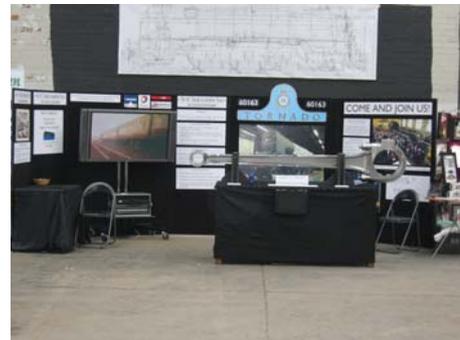
**Off-Site** – project management of boiler design and manufacture, technical support for tender procurement, quotations for boiler fittings and establish certification route, seek out brake components, and work up detailed scheme for brake installation.



The cab is delivered to Grosmont for riveting

With **MORE MONEY** we could start to fit brake gear, order and fit springs and running gear, balance coupled wheels, manufacture boiler and other non-ferrous fittings, start boiler pipe-work and order the tender.

**Sales and Marketing** We had a large stand was at Railfest (NRM - 29 May-6 June) manned by a total of 24 people. It produced £1096 cash, 948 competition entrants to “guess the weight” of the inside connecting rod. We have already achieved 30 new covenantors and continue to follow up the names now on the database.



Our stand at Railfest

We hope to refresh the form of the Spring Day Out and, after analysis of covenantor location, run Regional Meetings at 8 possible venues from Newcastle to Southampton.

We are committed to providing accurate information to covenantors and sponsors on a regular, frequent and timely basis, but need to do this cost effectively. This Newsletter, to meet that remit, comes from the new Publications Editor (detail in the next Top Link). A new brochure is in hand, new covenant leaflets and an updated prospectus are in preparation, and we plan to issue a Trust ‘Who’s Who’ by Christmas.

We are looking to establish a network of people to maintain regular contact with Tourist Information Centres, Heritage Railways and Museums to keep them up to date with our literature.

An Image Archive of still photographs and press clippings is in preparation. It may extend to video later and, once proven, will be available for covenantors’ use.

The Trust Presentation, currently on 35mm slides, is being updated.

We plan permanent display boards at the Locomotive Works, and, *if more people will help*, hold more Open Days there in 2005. We are developing new display materials to support attendance at exhibitions, and we are committed to the NRM and NYMR in 2005. *More people would allow us to appear at more venues*. On-train marketing goes on in several locations, but, again, *more help would widen our scope*.

The Web-Site is a key element in our communications strategy, and we plan to have it updated from early 2005.

We continue to seek sponsors, and we have had some recent success. We will significantly improve our recognition of them.

**With your help we can - and will - get more covenantors & supporters!**