



The A1 Steam Locomotive Trust
New Steam for the New Millennium

The Communication Cord

No 8 Newsletter of The A1 Steam Locomotive Trust March 2007

Historic Moment in Sight *Tornado's* boiler will soon be on the frames!

Plans are now well in hand for the exercise of putting the boiler onto *Tornado's* frames and arriving at the historic moment when, for the first time, she will take on the overall appearance of the 50th Peppercorn A1. However, as previously announced in Top Link 14 (page 4), health and safety considerations preclude the presence of anyone not directly involved in the boiler mounting operation, but a photographic record of the occasion will be made for later publication and for the Trust's archive.

Boiler Weekend

Following this key moment in the progress towards *Tornado's* completion, and as previously announced in Top Link, we believe it is right that, after the Works team, you, our Covenantors and supporters, should be the first to see the frames carrying the boiler in position. **To that end a special 'boiler' weekend has been arranged. A separate sheet included with this issue of TCC gives full details.** We look forward to seeing you there.

Financial Shortfall below £100,000

Yet another major milestone was passed just as this Newsletter went to press when it was found that the amount needed to ensure *Tornado's* completion had fallen below £100,000! This superb achievement, which allows us to quote a 5-figure shortfall for the first time, will encourage everyone to realise just how tantalisingly close we are to achieving the Trust's goal. We hope that Covenantors will let all their friends and contacts know that the time left for people to join in our quite outstanding project before its completion is getting very short.

Getting the Message out

Those beavering away behind the scenes to bring our project to a wider audience are to be congratulated on the initiatives they have taken. An example was an item in both The Daily Telegraph's Valentines Day Supplement and its Business News which encouraged ladies to buy a *Tornado* component for the man in their life! Significant Dedicated Donations have been received as a result of this and similar press coverage in The Northern Echo, as well as on Tyne-Tees TV, on sponsoring a component of *Tornado* as a Valentine's gift. The Railway Press continues to report *Tornado's* progress with the regular news column in Railway Magazine, a major 3-page article in Issue 95 (22 February – 14 March) of Heritage Railway and 'an exclusive, up-close look at how the A1 Trust is progressing with new-build A1 *Tornado*' promised in Issue 334 of Steam Railway (on the shelves on 23 March). Our Engineering Director recently addressed the Railway Division of the Institution of Mechanical Engineers. At a different level, we have had an article published in 'Air Mail', the house journal of the Royal Air Forces Association, about *Tornado* as a memorial engine, and it is hoped that we might get an article into the magazine of the Isle of Man Steam Railway Supporters' Association about locomotives with names connected with Sir Walter Scott – they have one (now a museum exhibit at Port Erin) and the original Peppercorn A1s had a number! A version of that article will be included, space permitting, in a future Top Link. *(We have had several calls arising out of the Air Mail article. If you know of any other magazines that may be willing to include information on our project, please let me know – Ed).*

Engineering Progress

Motion

Bedestone has completed the grinding of the inside radius link and it is now with I D Howitt Ltd at Crofton for assembly to the radius link trunnions which have been completed by Multi-Tech. All the case-hardened inside valve gear components have been collected from Holts and are at Crofton for grinding. The inside reversing rod lifting arms and cross shaft have been fitted, the reverser cross shaft removed and the arms to drive the inside cylinder reverser and for the balance spring slid on. The final positions will be set on assembly of the rest of the inside valve gear. The inside big end brasses have been finished, machined and have been hand fitted to the crank pin, and the inside connecting rod is in the process of a trial fit to the crank pin. All the rods and components have been weighed and the connecting and eccentric rods swung to determine the pendulum period to permit calculation of the centre of percussion. This was done in the presence of Andrew Hemming, a former marine diesel engineer, who is in the process of finalising the wheel balancing calculations. The oil rod oil box tops have been completed and will be riveted or welded to the rods in the near future.



The Trial Fit of the Inside Big End



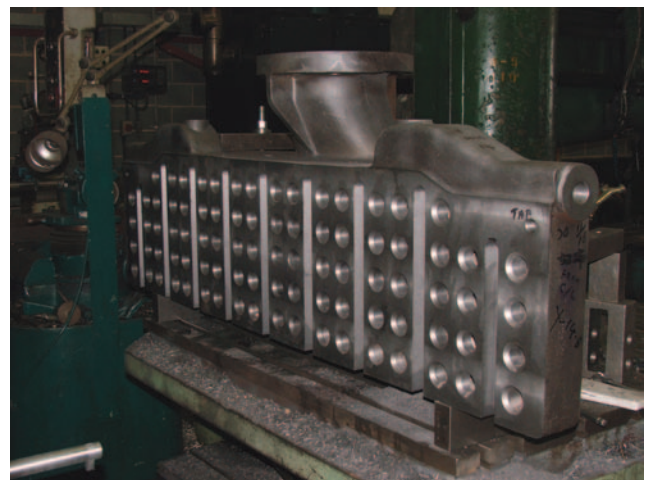
Timing the Inside Eccentric Rod

Pipework and Fittings

Fittings, for which patterns were made by Elsfield Patterns and South Lincs Patterns, have been cast by the latter company. Good progress has been made with the pipe work between the frames. Great Northern Steam has been tasked to make a large number of cones, nipples and nuts of various sizes for the steam pipe work. The ex-Sir Nigel Gresley exhaust injector has had a mounting bracket made and the rear section of the exhaust steam pipe completed.

Boiler Ancillaries

The superheater header casting has been subject to ultrasonic non-destructive testing at Keighley Laboratories and has been found to be sound. It is now with Multi-Tech where machining is under way. Great Northern Steam has completed the ash pan and it is now at Darlington Locomotive Works where it has been lowered into place on the frames to check the fit. Good progress has been made with the boiler clothing and the rocking grate lever brackets have been fitted to the back of the firebox. The new chimney pattern is now at South Lincs Patterns for casting.



Machining the Superheater Header



The Ash Pan in the Frames

Air System

The brake star stay has been refitted, and the front pump and two brake cylinders have been fitted. Design is under way to mount the pump governors and for pipe work between the governors and the pumps. Great Northern Steam has continued work on the modified cab floor structure design and a trial fit is expected in the near future.

Brake and Spring Gear

Slight re-design has eliminated the need for forgings for the brake gear, but further work is in hand to find a forge master for the spring gear and engine/tender coupling. North View is machining the brake lever fulcrum casting which is bolted to the cross stay. Brake hangers, pull rods and compensating levers are being made by I D Howitt Ltd, and brake blocks (including spares) have been delivered for the engine and tender.



The Tender Floor at Crofton

Tender

The Vehicle Acceptance Body has agreed the modified tender axle profiles and an amended order has been placed with Firth Rixson. Delivery is expected by the end of February. William Cook Cast Products Ltd (the Trust's premier sponsor and sponsor of the tender) has cast and proof machined all the wheels. The axle boxes are cast and machining is under way. Timken has delivered the Class D cartridge bearings which will be fitted to the axles after the wheel sets are assembled by Ian Riley at Bury ('Class D' denotes the size). The tender brake cylinders and the alternator mounting have been fitted to the tender. North View has completed the tender tank base which has been moved to Crofton for fitting to the frames which were turned over by crane with BBC Sheffield's cameraman present.



6 of the 8 Tender Wheels at William Cooks

All pictures above : © David Elliott



The Tender Frames turned the correct way up © Nigel Facer

Mailbag

Shed Bashing with the Beatles

Covenantor Phil Mathison writes: 'I have just published a book about my trainspotting days in the 1960s entitled 'Shed Bashing with the Beatles' and sub-titled 'A Trainspotter in the Swinging Sixties'..... The book is a paperback measuring 216mm x 140mm, has 140 pages, the ISBN number 0-9546937-3-6, and is available from Dead Good Publications, 12 Wallingfen Lane, Newport, Brough, East Yorkshire, HU15 2RF for £7.99 post free. **I will donate £2 from each copy sold to purchasers who mention the A1 Trust when they order the book.** There are many references to A1s in the book including 'Saint Mungo' in its last days at Hull Dairycoates, Tweedmouth's allocation awaiting their fate at Bolckow's Yard at North Blyth and visits to York, Doncaster, Copley Hill, Neville Hill, etc'.

(Editor's Note: the first £2 is in the kitty, and I have thoroughly enjoyed reading Phil's trainspotting memoir).

A1s in Jigsaw Puzzles

Covenantor John Harrington writes: In a charity shop the other day I bought a jigsaw puzzle showing A1 60162 leaving Edinburgh Waverley Station on the Queen of Scots Pullman. I am also a member of the Pullman Society. The 500 piece puzzle was made by Handley Printers Limited of Stockport, Cheshire, SK6 2BR. I can't remember seeing anything in Top Link about A1 puzzles.

(Editor's Note: The painting in Mr Harrington's jigsaw is by an artist called Hodge. I know of 2 other A1 jigsaws: a painting of 60114 by A N Wolstenholme published by Ian Allan and a painting of 60131 by Kevin Parish published by King International. If anyone has information on others please let me have the details).

Archive Material

My thanks to Mr Philip G Taylor of Burton-on Trent for sending a copy of the front cover of the 'Locomotive Express – a mid-monthly magazine', Issue 9 published in September 1948 and of the article in it about the newly-introduced A1s (with a photograph of 60114).

(Editor's Note: I had no knowledge of such a magazine. Does anyone know more about it?).

Editorial

The sense of the gathering pace towards completion of *Tornado* is now almost palpable and creates a lot of excitement, but this must not be allowed to distract us from the demands of the programme required to achieve our dream. It behoves all of us to keep our eye on the ball whether it is by finding new ways to raise the outstanding funds needed, putting off visits to Darlington Locomotive Works that are likely to interfere with progress, or helping to raise the profile of the Trust by supporting initiatives to publicise its work. In concentrating on the tasks needed to finish *Tornado*, we must also keep in mind the necessity to consider what happens once she is rolled out and is in operation for there are some long term matters that must be addressed. Among these is the necessity to create the funds which will be needed as *Tornado* reaches the time when an overhaul is due.

Convention 2007 I remind everyone that the 2007 Convention is to be held in Darlington on 20 October; I do hope that this is in your diary?

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